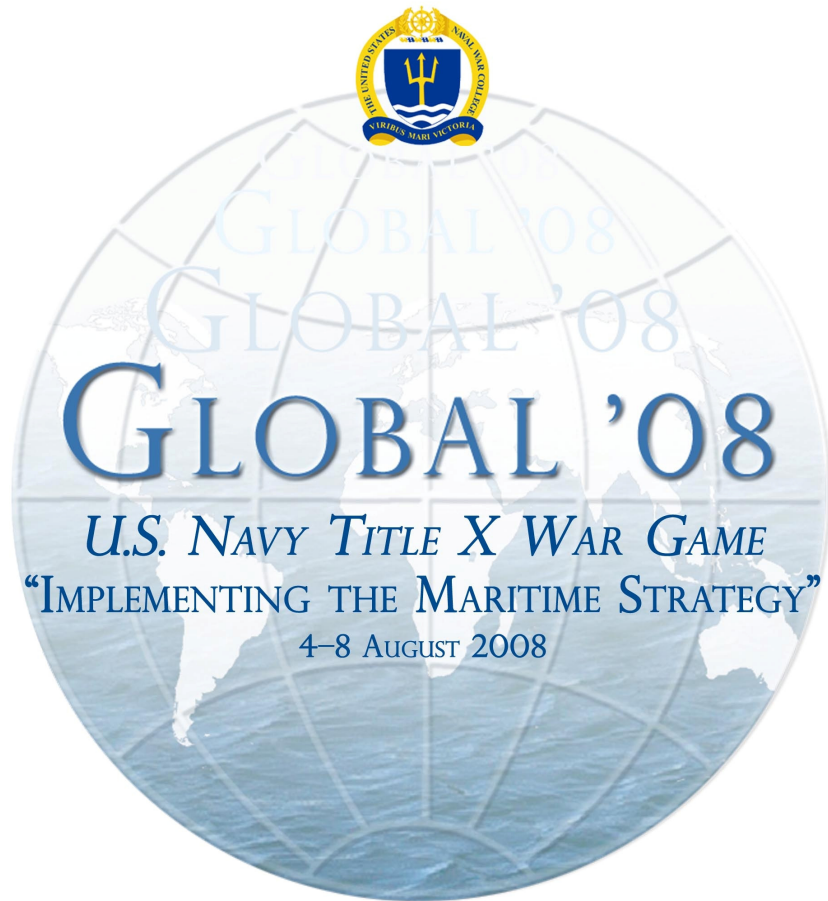




GAME REPORT
U.S. NAVAL WAR COLLEGE, NEWPORT, RI
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Executive Summary

Background

During the period 4-8 August 2008, the Navy's Title X War Game, Global '08, was held at the Naval War College (NWC) in Newport, Rhode Island. The game focused on developing insights regarding the capabilities, capacities, and risks associated with implementation of *A Cooperative Strategy for 21st Century Seapower* (CS 21). The game organizers assigned over 190 participants, including representatives from 19 foreign navies, to one of seven cells (six regional and one global), asking them to "parachute" into one of four alternative futures and consider a series of questions dealing with security threats, maritime roles and tasks, concepts, and capabilities for responding to the challenges arising in these futures. Initially developed for the Navy Strategic Planning Process (NSPP), the four futures were functions of two primary drivers: extremism and resource rivalry. The futures were not intended to be either comprehensive or predictive.

Time constraints limited each cell to assessment of a single scenario. Cells were thus assigned alternative futures as follows:

Alternative Future

Made in East Asia

Global Chaos

United We Stand

Tri-polar

Cells

Asia/Pacific & Latin America/Caribbean

North America

Central Asia/Middle East & Europe

Africa & Global

Game results/Maritime themes

The observations and insights from the game were organized around seven maritime themes which had relevance across all of the cells and are briefly discussed below.

Maritime Security: Game participants unanimously saw maritime security as an important mission, and it was a central focal point of game discussions. International players, in particular, considered maritime security primarily a law-enforcement rather than a counterterrorism function. Many of the participants also preferred U.S. assistance in the form of training and exercises. Finally, most participants perceived the facilitation of maritime security as an activity that could be leveraged to enhance trust between the U.S. maritime services and their counterparts in other countries.

Persistent Maritime Presence: Many participants regarded the regular and sustained presence of forward deployed maritime forces as a critical enabler for all other themes, and an important part of the Navy's contribution to the national security objectives of the United States. Specifically, forward maritime forces allowed the Navy to meet the challenges identified in Global '08 as requiring a timely response.

Credible Combat Power: Participants identified five key components of credible combat power: defeating anti-access strategies, providing integrated air and missile defense, achieving sea control, projecting power ashore, and aggregating and disaggregating forces. They further emphasized two key capabilities associated with

credible combat power: the ability to exercise sea control and subsequently project power ashore, and deterrence.

Building Partnerships: For game participants, building partnerships meant developing relationships with allies, friends, and stakeholders across the full spectrum of maritime activities in order to create trust and effectively accomplish shared maritime goals. They applied this concept of partnership across all regions, futures, and the full range of maritime activities, indicating that foreign partners wanted the U.S. to be involved with their maritime security in most conceivable futures. From that perspective, the participants noted that the United States will have to make significant investments in maritime resources on a global basis to build partnerships that meet the expectations of existing and potential partners. As participants and others have stated, “you can’t surge trust.” Building partnerships will accordingly require tolerance, patience, and some willingness to adapt and conform to partner standards.

Humanitarian Assistance (HA) / Disaster Relief (DR): All of the player cells agreed that HA/DR – defined within the event’s conceptual framework as the ability to “alleviate human suffering and contribute to regional security and stability through deliberate (HA) or immediate (DR) response” – was a valuable component of CS 21. Participants also felt that the role that conducting HA/DR operations and training played in building partnerships and improving coordination with non-U.S. forces was valuable. They articulated three important criteria for the successful execution of HA/DR efforts: timeliness, well-considered strategic communications (in particular, placing a local face on the operation), and preparation (including investment in physical infrastructure and personnel training).

Shared Awareness: Virtually all of the players viewed information sharing between stakeholders (both governmental and non-governmental agencies and organizations) as vital to the development of improved situational awareness. They came up with five primary insights regarding shared awareness. First, information sharing is a key enabler, particularly for information-related concepts such as maritime domain awareness (MDA) and common operational picture (COP). Second, the barriers to the successful sharing and exchange of information are policy-related as well as technical, such that policy changes – not just technological advances – can lead to improved information sharing. Third, trust, developed through engagement activities such as coalition exercises and operations, would help expand the range and depth of interaction between the United States and partner countries. Fourth, information sharing must be a two-way street. Finally, ISR, particularly persistent ISR provided by maritime forces, is a key maritime requirement.

Strategic Communications: All of the cells considered effective strategic communications – defined as the sum of all actions and messages (intentional and unintentional) influencing target audiences – as an integral part of any successful U.S. strategy. An important corollary was that the Navy had to develop and disseminate coordinated and consistent strategic communications. Thus, to be successful, the Navy must establish the ability to design and implement a standardized process at the Navy component commander level for effectively coordinating maritime actions and messages so as to convey consistent U.S. government purposes and objectives.

Concepts discussion

One of the goals of Global '08 was to evaluate the contributions of relevant joint and maritime concepts to CS 21 implementation. The concept evaluation activity did not go as smoothly as hoped, as many of the players were unfamiliar with the concepts. Nevertheless, the cells did engage in several constructive, substantive exchanges. The three most robustly discussed concepts were the Sea-basing (SB) Joint Integrating Concept (JIC), the Global Maritime Partnership (GMP) concept, and the Irregular Warfare Joint Operating Concept (JOC).

The Africa Cell favorably reviewed the draft 2008 Naval Operations Concept, but noted that the United States needed to refine regional, state-to-state, or even bilateral approaches for specifically addressing disparate threats, challenges, and opportunities to fully implement the GMP concept. The Global Cell noted that the maritime tasks identified were well supported by today's concepts, but that the concepts might assume more maritime access than may actually exist in future scenarios. The Latin America Cell cited the Global Fleet Station concept and the SB JIC as keys to the implementation of CS 21 in that region. The North America cell identified Global Maritime Situational Awareness as the one concept relevant to all five of its maritime tasks.

Additional observations

Aggregation – disaggregation: Global participants saw significant material and training challenges implicit in the requirement to disperse naval forces tailored for specific missions throughout a region and then quickly bringing them together in order to constitute credible combat power.

Sea-basing: Participants defined sea-basing as “forces based at sea” in a manner consistent with the SB JIC. Pursuant to that concept, the appropriate byword for forward-deployed maritime forces is “live nearby, and visit often.” Regional participants preferred to see U.S. maritime forces exploit their ability to operate from the sea to relieve local governments of pressure to grant them access in the form of shore basing rights. Elsewhere, with respect to an anti-access environment created by a peer competitor, players determined sea-based, long-range penetrating ISR capabilities to be critical to effective operations. In a third region, they assessed sea-based forces as providing required credible combat power without the negative force-protection and strategic communication burdens of a land presence.

“Whole of Government” approach: Participants felt that the U.S. government needed to do a much better job of executing strategic communications and integrating activities across the entire range of government functions.

Conclusions

Without question, the Global 2008 Title X War Game was an effective tool for exploring CS 21 implementation and produced valuable feedback from a wide array of participants. The players' discussions, activities, and briefs provided many useful insights that the U.S. maritime services should consider as they work to implement CS 21 in the coming years. In particular, the participants identified regionally-focused, mission-tailored responsiveness as the key to successful execution of CS 21, and concurred that the

development and maintenance of that capability will be crucial to the Navy's overall effectiveness for the foreseeable future. The game also highlighted the importance of coordinated strategic communications for CS 21 implementation. The upshot of this observation was that while CS 21 establishes the Navy's role in implementing the United States' basic maritime strategy, a comprehensive "whole of government" approach to maritime strategy execution will be required for success.

Game Overview

Introduction

During the period 4-8 August 2008, the Global 2008 Navy Title X War Game was held at the Naval War College (NWC) in Newport, Rhode Island. The overall purpose of this exercise was to develop insights regarding the capabilities, capacities, and risks that the new U.S. Maritime Strategy, *A Cooperative Strategy for 21st Century Seapower* (CS 21), entail. Such insights would enable the Navy to better focus follow-on capabilities analysis and inform force design, and to evaluate the applicability of relevant joint and maritime concepts to CS 21 implementation.

This report will provide the reader with a basic understanding of the processes and procedures used in the game, the game products, and the insights generated.

Game objectives

The Global 2008 Title X War Game (“Global ‘08”) was designed to fulfill three specific objectives:

1. To guide the Navy’s future alignment of maritime missions, the naval capabilities needed to carry them out, and the Navy’s strategic characteristics with CS 21.
2. To examine generally how operational execution of CS 21 could affect the future strategic environment, and in particular how closer maritime relationships could affect key international disputes; how the new strategic environment may effect assumptions about the prevention of war among major powers through deterrence, engagement, and other means; and how potential adversaries, including non-state actors, might respond to CS 21.
3. To furnish insights into how the execution of CS 21 can be enhanced by joint, interagency, and coalition capabilities, as well as how other agencies and organizations themselves can benefit from the strategy by assessing the compatibility of future service and joint concepts, identifying concept and capability gaps, and ascertaining potential strategic partnerships.

In addition to these three primary objectives, Joint Forces Command (JFCOM) engaged in a separate and parallel analytic investigation of its own objectives during the Global 2008 Title X War Game. JFCOM’s investigation primarily focused on the role of maritime forces in supporting Foreign Internal Defense, Irregular Warfare, and Counterinsurgency Operations.

Game design and methodology

In order to effectively design an exercise that meets the foregoing objectives, game designers established three major assumptions. First, while the National Security Strategy may change in 2025, the general theme of “cooperation” will remain and will guide U.S. actions abroad. Second, CS 21 should be the governing document for maritime operations

in the timeframe of the exercise. Third, no discussion of specific platforms or weapon systems should be undertaken.

The Global 2008 Title X War Game utilized a moderated, seminar-style format to optimize participant interaction. 190 participants, including representatives from 19 foreign navies, were divided into cells and asked to “parachute” into one of four alternative futures and consider a series of questions dealing with security threats, maritime roles and tasks, and concepts and capabilities for responding to the challenges implied in these futures.

Each cell was first asked to develop its own “regional perspective” using the participants’ expertise to produce a specific, coherent view of how the future would look in a particular region on the basis of two principal drivers: resource rivalry and extremism. The game designers determined that a political, military, economic, sociological, informational, and infrastructural (PMESII) framework would be the best one for guiding the development of this regional perspective insofar as it accommodated the different experiences of military and civilian participants, and ensured that all seminar cells were using a common approach that would facilitate comparison and analysis. On the basis of the PMESII framework, participants identified issues in the form of challenges and opportunities that were likely to arise in their region.

Guided by the National Security Strategy and similar principles, the participants then postulated possible missions across the diplomatic, information, military, and economic (DIME) spectrum to mitigate threats, overcome obstacles, and exploit opportunities identified for their respective regions. Using the CS 21, participants then identified maritime tasks that would support these missions and specifically assessed their negative implications. The focus of this activity tended to be on the non-U.S. and/or non-maritime service representatives in the cell, as they were likely to be more critical of the maritime tasks than the American officers who had generally proposed them. Framing the discussion were three areas of investigation: downsides; mitigating factors that minimized the downsides; and the cost (or benefit) of doing nothing if adequate mitigation appeared impossible. The game participants also examined the relevance and suitability of existing maritime and joint concepts to the tasks, and determined what capabilities were required to accomplish the tasks and, ultimately, the mission. Finally, participants arrived at a Capabilities Cluster Analysis, reflecting possible priorities, decision criteria, risk considerations, and hedges.

To distill and organize the insights derived from the seminar discussions, moderators drew on individual participant expertise, clustering techniques borrowed from language processing, and cluster analysis using matrix-style summaries. The expansive nature of the exercise was such that each step tended to multiply the number of items under evaluation. A single issue produced multiple strategic missions, which in turn each produced multiple maritime tasks, with each requiring multiple capabilities, etc. By periodically aggregating the data into groups, clustering reduced the volume of usable data to a manageable level while preserving analytic detail. Clustering also helped organize relationships among maritime tasks or capabilities into a form more effective for joint acquisition and management.

Initial player-generated data was collected using formatted templates and spreadsheets. These products were used to develop intermediate work products and the plenary session presentations in such a way as to preserve the linkage between *mission* and *capability*. Maintaining this linkage was crucial to minimize the temptation for some participants to advocate specific weapon systems or platforms without first establishing a requirement for a *capability* based on a future or current *threat* or *challenge*.

A diagram of the event process is shown in figure 1.

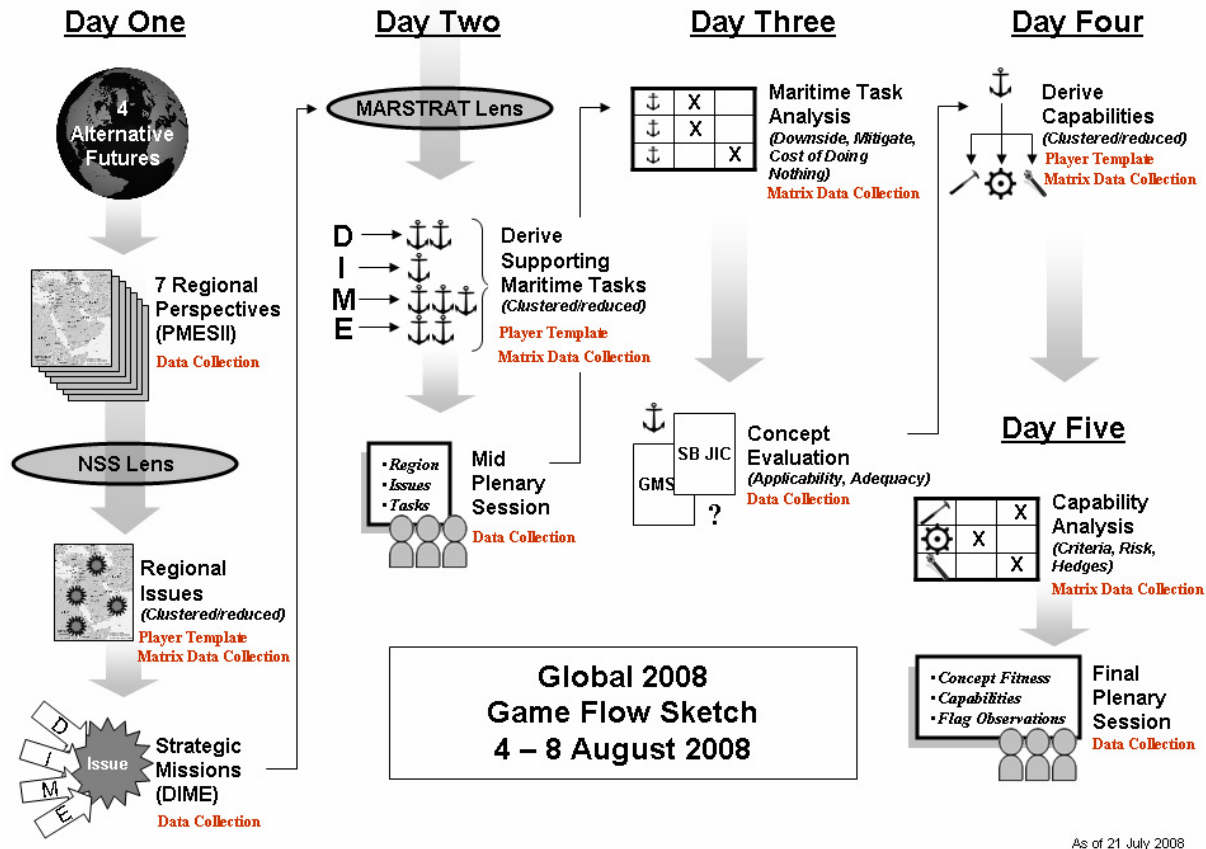


Figure 1 – Event Flow Process

Game organization and participant roles

The event organized participants into one of six Regional Cells (North America, Latin America and the Caribbean, Central Asia and the Middle East, Asia Pacific, Africa, and Europe) and one Global Cell, all of which were overseen by a Control Cell.

Each Regional Cell comprised 20-35 participants. Participants did not role-play, but rather represented their parent organizations. Department of Defense (DoD) participants (including flag and general officers) represented the combatant commander and subordinate component headquarters. Other U.S. government participants represented

agencies such as Department of State (DoS), Department of Justice, U.S. Agency for International Development, Department of Homeland Security, etc., depending on regional focus. International participants represented governmental and military interests from various regions. Industry representatives, along with academic and non-governmental organization (NGO) representatives, were assigned to regional cells as appropriate.

The Global Cell consisted of DoD participants and other U.S. government participants with global responsibilities, such as DoS, as well as representatives from industry, academia, and NGOs operating internationally. The Global Cell, with just over 40 participants, was appreciably larger than the Regional Cells.

The seven seminar cells were essentially self-contained for this event, with cell-to-cell communications limited to messages between cell moderators/facilitators/data collectors and the Control Cell via email using an unclassified game network (GAMENET) in McCarty-Little Hall. As cells completed various products (briefs, templates, matrixes, etc.), they were posted on the GAMENET to ease their transfer to the auditorium for use in plenary sessions, as well to provide each cell common access to briefs presented earlier or other relevant material.

The Control Cell consisted primarily of NWC personnel, including reserve support, filling the roles of cell moderators, facilitators, and data collectors while the NWC Office of Naval Intelligence (ONI) detachment personnel provided amplified scenario (alternative futures) information to the participants as required. Additionally, representatives from Joint Forces Command (JFCOM), the Navy Warfare Development Command (NWDC), the Center for Naval Analyses (CNA), and the Marine Corps Wargaming Department also contributed their expertise to the Control Cell.

Alternative futures

The event employed four alternative futures that had been developed by Decision Strategies International (DSI) in support of the Navy Strategic Planning Process (NSPP). These four futures were not intended to be comprehensive or predictive. Rather, they represented four possible scenarios resulting from the interplay of two primary drivers: extremism and resource rivalry. Many other forces, of course, help shape the future, but these two were chosen on account of the wide variation in their respective potential ramifications. The alternative futures included:

- *Made in East Asia*. Extremism: disempowered/passive (i.e., low); resource rivalry: collaborative (i.e., low). Healthy global economic competition has benefited the world as a whole. Asia is growing faster than the rest of the world. International companies drive innovation. Extremist tendencies have been channeled into political dialogue; militaries, with no immediate enemy, struggle for relevance.
- *Global Chaos*. Extremism: super-empowered militant (i.e., high); resource rivalry: hyper-competitive (i.e., high). The world is very unstable and unsafe – super-empowered militants have access to and have used nuclear, chemical, and biological weapons. The global economy is in a tailspin, as international cooperation has waned and countries are hoarding natural resources. The U.S. is

struggling economically against other resource-rich regions. International tensions are high, with several military conflicts ongoing; the U.S. considers itself at war for resources.

- *United We Stand*. Extremism: super-empowered militant (i.e., high); resource rivalry: collaborative (i.e., low). The global economy has shifted from oil-based to renewable and alternative energy sources, with technological breakthroughs shared globally to the benefit of the world's economy. The world's largest nations, led by the U.S., cooperate to fight a common and highly potent terrorist threat. Terrorists repeatedly use chemical and biological weapons, making security the paramount global issue.
- *Tri-polar*. Extremism: disempowered/passive (i.e., low); resource rivalry: hyper-competitive (i.e., high). Coalitions led by three powerful states emerge and compete for dominance in a rivalry verging on a cold war. A strategic build-up of coalition strategic weapons, missile defense, and space capability is underway. Natural resources such as oil, water, and other minerals become even more scarce and essential to national economic and political power. Extremism has waned.

There was a tendency among some of the participants to challenge the feasibility or relevancy of some or all of the futures scenarios. The designers' intent, however, was not to determine whether or not a given alternative future was likely to materialize, or even how it might arise, but rather to assess how the maritime services would need to respond if it came to pass. The idea was that if the futures were regarded as extreme ramifications of potentially adverse trends, then applying the MARSTRAT to them would illuminate both (1) the capacity of the strategy to react to extreme eventualities, and (2) its capacity to prevent such eventualities.

While it was desirable for each cell to consider the full range of futures and their implications for their region, the time available limited each cell to a single scenario. Cells were thus assigned alternative futures as follows:

<u>Alternative Future</u>	<u>Cells</u>
<i>Made in East Asia</i>	Asia/Pacific Latin America/Caribbean
<i>Global Chaos</i>	North America
<i>United We Stand</i>	Central Asia/Middle East Europe
<i>Tri-polar</i>	Africa Global

Data collection

Data for Global '08 was collected from electronic sources, firsthand observers, and hardcopy working materials. The different types of data sources fell into the following broad categories:

- PowerPoint, Excel, and Word documents produced before the start of the event, including background documents, briefings given to the participants, and supplementary materials
- PowerPoint, Excel, and Word documents produced by the participants during the event
- Templates filled out by the participants and input into Excel templates
- Notes from the participants
- Notes from the data collectors

Each cell in Global '08 was assigned three trained personnel, drawn predominantly from the NWC War Gaming Department, to perform data collection functions. The first, a “facilitator,” assisted the moderator in running the cell’s seminar discussion, and had primary responsibility for the conversion of participant hardcopy templates into entries in the Excel templates. The other two data collectors assisted the facilitator when required (especially with data entry) and throughout the game maintained observers’ logs.

The primary data collection tool was the set of linked Excel templates filled out by the facilitators during event play. Clustering was accomplished via standardized activity sheets, which were subsequently entered into a Microsoft Excel master spreadsheet by members of the Data Collection Analysis Production team (DCAP). Additional sources included the data collectors’ logs and their cell summaries.

The DCAP Team Leader reviewed all cell materials, including participant notes and whiteboard inputs, clustering worksheets, environmental observations, and spreadsheet entries, on a daily basis. Hardcopy sources served mainly as a documentary basis for the Excel template entries and as supplements to electronic data. As a result, while hardcopy records were retained and organized, it was not necessary to consult them during the analysis phase of the exercise.

Game Results

General approach

Although the initial plan was to present the results of the exercise using the game methodology framework (mission, tasks, concepts, and capabilities), it became apparent during the post-game analysis that there was significant overlap between categories: one person's task was another's capability. Accordingly, the analysis team decided to organize observations and insights from the game around seven maritime themes which they identified as having common relevance across all of the cells. The themes were maritime security, persistent maritime presence, credible combat power, building partnerships, humanitarian assistance/disaster relief, shared awareness, and strategic communications. For each theme, the team derived a working definition, key observations and insights, and implications regarding capabilities (what is required), capacity (how much is required), and risks of pursuing or deferring implementation. The team then delineated linkages among the themes themselves and between the themes and the flag and general officer outbriefs as well as CS 21. An overview of the cell discussions is presented in Appendix A.

PMESII overview

Based on the framework provided by the particular alternative future assigned to it, each cell developed region-specific PMESII perspectives that defined the boundaries of the discussion and heavily influenced the types of maritime activities prevalent in each region. A category-by-category overview of their perspectives follows.

Political. Regional players from the Africa and Latin America cells emphasized that the regions are not monolithic entities, and that the U.S. sometimes falls into the trap of lumping the often highly disparate countries of these continents together in a way that implies more commonality among them than actually exists. While they share many perspectives and concerns, the countries of these regions are independent political and social entities and should be understood as such. There was considerable polarity among the cells on the subject of integration, with the Asia-Pacific, Europe, and Global cells foreseeing an increase in regional integration, and the Africa and Latin America cells seeing a decrease. This does not correlate with any of the variables in the scenarios presented to the cells, but it is consistent with the point that casting Africa and Latin America as monolithic entities is a mistake. Three of the four "resource collaborative" cells (Europe, Latin America, and Middle East-Central Asia) postulated an increase in political instability, crossing the spectrum in terms of the extremism variable.

Military. None of the cells foresaw an existential threat arising out of the scenarios described. This result, of course, is heavily dependent on specific input from the alternative futures, although it is mildly interesting that the players were not able to imagine such a threat in any case. All of the cells save Africa viewed the maintenance and protection of sea lines of communication as an issue of some concern. Players often

mentioned these challenges in conjunction with increased resource rivalry as a driver of interstate conflict.

Economic. Both China and Africa arose often in an economic context. Two cells (Africa and Latin America) pointed out that Chinese economic activities were viewed in those regions as being good for local economies. Three cells (Africa, Asia-Pacific, and Global) postulated that there would be competition for African resources under their alternative futures. The consensus in all cells was that the level of trade would depend on the cost of transportation. Finally, most cells viewed the oceans themselves as a resource; as one member of the Global cell said, “70 percent of the Earth has no sovereign control, and there are a lot of resources there.”

Social. Social unrest was a recurring theme in many of the cells, with North America postulating “social fragmentation” and three cells whose assigned alternative futures de-emphasized resource competition (Asia-Pacific, Latin America, and Middle East-Central Asia) foreseeing political instability. There was a high correlation between this lack of resource competition and forecast demographic or population problems (Asia-Pacific, Europe, and Latin America), and two cells (Asia-Pacific and Europe) also projected immigration or emigration issues. Small but vocal contingents in the Africa, Latin America, and North America cells stressed the importance of global warming and/or rise in sea level. The Global and North America cells saw the resource-competitive nature of their scenarios as producing lower regard for international law.

Infrastructure. Two minor infrastructure-related themes echoed across the cells. The first was a general concern for critical infrastructure protection (CIP). The second was the notion, presented in the Africa and Latin America cells, that U.S. companies that come to the region to build infrastructure to serve primarily their economic interests without taking local concerns into account risk alienating local support, especially since other states (e.g., China) may be willing to make local infrastructure improvements such as building roads.

Information. Information access and technology were uniformly considered important, but the cells had different ideas about their effects. The Africa and Europe cells thought that access to information could be a destabilizing force insofar as the disadvantaged would become more aware of and antagonized by their relative deprivation. The Asia-Pacific cell noted, however, that current information technology also reduces the cost of education for the disadvantaged even if – as stated by the Europe cell – uneven Internet access prevents them from using the Internet to unify or improve their condition.

Maritime themes

Maritime security

Maritime security, based on the participant discussions in Global ‘08, consisted of law enforcement activities such as anti-smuggling and Economic Exclusion Zone (EEZ) enforcement actions, as well as anti-piracy, anti-terrorism, trade route security enforcement, and maritime infrastructure protection functions. In the exercise, maritime security emerged as a universally important mission and therefore a major focal point.

Three primary insights regarding maritime security flowed from the post-event analysis. First, from the standpoint of foreign participants, maritime security was primarily a law-enforcement rather than a counterterrorism function. This finding has important implications for the U.S. maritime services, which since September 11, 2001 have focused the majority of their maritime security efforts on addressing terrorist activities. The inference is that to increase international participation in maritime security activities, the United States must explicitly expand its own maritime security mission to include general law enforcement as well as countering terrorist threats.

Second, there was a broad-based desire, particularly in the Africa and Latin America cells, for the U.S. to help develop indigenous nations' capabilities and capacities in the area of maritime security, and a consensus that the preferred method of assistance would be in the form of training and exercises. This was a particularly encouraging finding, since it indicated a willingness on the part of local nations to contribute actively to maritime security efforts, rather than merely depend on the U.S. to act as a global maritime enforcer – a role that the U.S., for its part, neither desires nor is able to perform without the assistance of a broad coalition of maritime nations.

Third, most participants saw maritime security as an area that could be leveraged to build relationships of trust between the U.S. maritime services and their counterparts in other countries around the world. By conducting maritime security training and participating in local maritime security exercises and operations, the U.S. can project the image of a reliable partner, one that can be counted upon to carry out its commitments and obligations not just in the maritime security sphere, but across the full range of military operations (ROMO).

The primary capability that U.S. maritime services will require in the area of maritime security is that of providing to partner countries training, including exercises, that is focused primarily on the littoral and riverine environments, rather than the blue-water environment. Thus, the U.S. Navy itself will need to develop sufficient capability and capacity in these environments to provide the requisite training and/or enlist the U.S. Coast Guard and U.S. Marine Corps to meet potential demand. U.S.-led training and exercises should be conducted on a multilateral basis when possible, but may be undertaken on a bilateral basis when circumstances dictate, and will require a long-term commitment to achieve the desired maritime security results and build a sustained level of trust between the U.S. and other countries. Achieving these goals, in turn, will require sufficient capacity to conduct training in multiple regions concurrently, particularly in Africa and the Middle East.

A robust U.S. maritime security policy poses two risks. First, it could adversely affect credible combat power by reallocating resources to maritime security. Second, it could furnish countries with maritime security capabilities that they might misuse to the ultimate detriment of the security environment. Conversely, however, a limited U.S. maritime security policy would jeopardize U.S. credibility with its regional partners, leading to an inability to build partnerships and increased regional instability due to reduced maritime security.

Persistent maritime presence

The event participants defined the theme of persistent maritime presence (PMP) as the regular and sustained presence of forward deployed maritime forces. They also cited PMP as a critical enabler for all other themes and an important part of the Navy's contribution to the national security objectives of the United States. Many of the problems identified in this exercise called for a timely response, and forward maritime forces allow the Navy to provide that response.

One of the critical components of PMP is physical presence, which was predominantly viewed as a deterrent across the ROMO that could be utilized to forge partnerships. The presence of maritime forces can contribute to critical missions, but it must be tailored to particular circumstances to avoid creating tension between the U.S and local populations and governments. How frequently a port visit or deployment to a region should be, for example, depends on the mission, region, and audience. While one area may require a permanent presence to conduct deterrence, another area may call for only an annual port visit.

The participants also saw maritime forces as amenable to flexible optimization. Sea-based forces can afford the Navy the deterrent benefits of presence and combat power while minimizing the political cost of a footprint ashore and the operational problem of fixed-target defense. Tailored PMP should apply to all regions of the world insofar as presence equals commitment. If the U.S. Navy's maritime presence is insufficient in a given region, the United States' political influence could wane as other competitors fill the space, and its ability to respond to crisis in a timely manner could be degraded or erased.

Credible combat power

As synthesized from participant inputs, the theme "credible combat power" can be defined as those factors, including sea control and power projection, that yield the capability to strike the enemy anywhere and anytime. The ability to provide credible combat power was directly linked to maintaining a PMP. Since Global '08 expressly concentrated on those aspects of the maritime strategy other than major combat operations, cell out-briefs did not highlight the combat-focused portions of the maritime strategy. Planners of future global exercises may wish to consider the challenges associated with protecting and sustaining U.S. forces in an access-limited environment.

Nevertheless, participants did provide some feedback on credible combat power, of which they identified five key components: defeating anti-access strategies, providing integrated air and missile defense, achieving sea control, projecting power ashore, and aggregating and disaggregating forces. The post-event analysis noted that while service joint professional military education curricula include consideration of sea control, the doctrine on that particular subject is notably insubstantial. It also observed that aggregation of dispersed forces could become a more prevalent concern in certain future force employment options, such as those subsumed under the global maritime partnership concept. Participants further noted the need for an ability to operate in the world's littorals.

Players identified two key capabilities associated with credible combat power: the ability to exercise sea control and subsequently project power ashore, and the importance of the deterrent aspect of combat forces. The post-event analysis further considered the challenge of establishing measures for measuring deterrence – that is, the effect of combat capabilities on the inclination of a potential adversary to attack or provoke. When discussing capacities, or “how much” of a given capability was needed, participants suggested that the ability to defeat a near-peer competitor was required.

Finally, taking these points on board, participants identified the risks of establishing credible combat power and of failing to do so. Risks associated with robust implementation included: spending excessive amounts in procuring the required force, especially in light of additional maritime security and PMP commitments; triggering a naval arms race; and creating disincentives to burden-sharing on the part of friendly regional partners. The two principal risks cited in not establishing a robust credible combat force were limiting the United States’ ability to influence events and, more substantially, increasing the likelihood of mission failure in executing key critical tasks and/or the probability of significant losses for coalition forces.

Building partnerships

Global participants defined building partnerships as developing relationships with allies, friends, and stakeholders across the full spectrum of maritime activities in order to create trust and effectively accomplish shared maritime goals. This concept of partnerships was applied across all regions, futures, and the full range of maritime activities.

The event design and specific futures did, of course, influence how big a role partnering played in the various player cells. Even though the design of the event made partnerships a driver in several of the futures, the level of partnership commitments specified by the participants ranged from low in the *Global Chaos* future, to significantly higher in both the *Tri-polar* and *United We Stand* futures, to maximum in the *Made in East Asia* future. This variation was significant, and indicates that our partners want the U.S. to become more involved with their maritime security in most conceivable futures – until the environment deteriorates so much that the U.S. is “hunkered-down” in survival mode. Thus, while the benefits of partnering are many, participants did not see a realistic opportunity for the U.S. to reduce maritime presence or draw down globally deployed force structure.

Partnerships increase cultural awareness, understanding, and information sharing, and the ongoing benefits of partnership become a mechanism of positive reinforcement. Initial awareness enables maritime forces to begin a partnership by putting their best foot forward. Accordingly, participants felt that it was important to ensure that the Navy had sailors who were already culturally aware – by virtue of personal background, professional experience, and/or training and education – as they entered into the individual relationships that collectively build partnerships between navies and governments. Culturally aware sailors will often be needed on a country-by-country basis.

Both new and established partnerships will require continual tailoring by maritime forces. New partnership activities should, if possible, initially focus on non-U.S. concerns in

order to build trust. Additionally, the Navy should regard the responsibilities of U.S. leadership in the partnering effort and inefficiencies in execution that might occur at first with less capable or experienced partners as initial investments that can pay large dividends over time. Participants in several regions, and especially Africa, indicated that developing partnerships may in some scenarios ultimately allow a future reduction in U.S. maritime resources after the higher initial investment.

Building partnerships will require the global investment of significant maritime resources. As participants and others have stated, “you can’t surge trust.” Building partnerships will require tolerance, patience, and some willingness to adapt and conform to partner standards. While technological differences will require monetary investment to overcome, a more significant challenge is policy incompatibilities at the national level that translate into significant barriers to partnership execution at the level of military-to-military relationships.

Several risks to building partnerships were identified. One is that of watered-down effectiveness. Partnerships work best when all parties have clear common interests and foci; many different incompatible interests and divergent partners can greatly hinder effective and efficient military action. An additional risk is that of sub-par results, which could materialize either when a partner is held to standards of mission success lower than those of the United States as it builds proficiency, or when the U.S. attempts to assume responsibility for a mission or task that a partner has proven unable to perform. Fully mitigating these risks of partner dependency would entail the expensive retention of the capability and capacity to execute a mission unilaterally.

Humanitarian assistance (HA)/Disaster relief (DR)

Operating under the premise that the military element of national power can be successfully employed for both the purposes of effective strategic communications and to foster and sustain cooperative partnerships with international partners, all of the Regional Cells and the Global Cell agreed that HA/DR was a valuable component of CS 21. Defined within the event’s conceptual framework as the ability to “alleviate human suffering and contribute to regional security and stability through deliberate (HA) or immediate (DR) response,” participants valued the role that conducting HA/DR operations and training played in building partnerships and improving coordination with non-U.S. forces.

Participants also raised several caveats to the execution of HA/DR missions as part of CS 21. They were as follows:

- *Timeliness.* HA/DR must be undertaken in a timely manner (within 72 hours of announcing the intent to engage in them, according to the Middle East, North America, and Europe cells). Failure to do so may prolong human suffering and send a strategic communication contrary to the one desired by the U.S. and its allies (possibly breeding anti-U.S. sentiment or serving as a recruiting tool of militant groups). The ability of the U.S. to meet such time constraints is substantially predicated on the use of forward-deployed maritime forces, and the United States’ ability to rapidly engage in effective command and control encompassing other coalition partners (e.g., interagency, NGOs, host nations).

- *Strategic communication.* Sending a platform appropriate to the mission is critical. At the same time, U.S. forces must effectively use information operations to prepare the affected local population for its response, lest victims comprehend, say, helicopters flying in formation over the beach as an aggressive or hostile act. Similarly, for political reasons the U.S. may need to allow the host nation to put a “local face” on the operation, even if doing so degrades response time or overall efficacy of effort. The U.S. should also seek to transfer HA/DR operations to non-military governmental and non-governmental entities as rapidly as possible, minimizing the U.S. military footprint and the corresponding risk of negative local perceptions.
- *Preparation.* Engaging in HA/DR operations as part of CS 21 could require a considerable investment in both physical infrastructure and personnel training. The Navy may need to purchase additional vessels with greater emergency medical care facilities. Sailors may need to receive foreign-language training and political, religious, and ethnographic orientation to increase their cultural familiarity with and sensitivity to a given country or region. Such investments do not come without a price: expanding the Navy’s capacity to engage in HA/DR operations would likely curtail its war fighting capabilities to some extent. Further, U.S. forces and coalition partners could become mired in long-term infrastructure rebuilding projects, reducing the United States’ ability to meet the other challenges discussed in CS 21.

Shared awareness

Shared awareness, as discussed by the players in Global ‘08, was focused on information sharing between stakeholders (both governmental and non-governmental agencies and organizations) and intelligence, surveillance, and reconnaissance (ISR) activities in order to create situational awareness, build partnerships, and enable the full range of maritime activities.

Five primary insights regarding shared awareness were identified during post-event analysis, with four of them focused on information sharing. First, the players viewed information sharing as a key enabler across all cells and futures, particularly for information-related concepts such as maritime domain awareness (MDA) and common operational picture (COP). Second, they indicated that the barriers to the successful sharing and exchange of information were both technical and policy-related. This was an important finding, since it meant that policy changes as well as technological advances lead to improved information sharing. Third, they identified trust as an important driver of information sharing. Developed through engagement activities such as coalition exercises and operations, trust would help expand the range and depth of interaction between the U.S. and partner countries. Fourth, they stated that information sharing was a two-way street, and that the U.S. had to be willing to share some of the information that it collected if it expected coalition countries to do the same. Finally, they identified ISR, particularly persistent ISR provided by maritime forces, as a key maritime requirement.

Capability, capacity and risk implications – information sharing. The primary capability identified by the players was that of sharing information with partners, including the ability to fuse various input data streams and provide outputs tailored to the particular

operational environment, and to execute such information-sharing functions in degraded or austere communication environments. They also recognized that technical and policy limitations can adversely affect the exchange of information, and that specific policy limitations have created a risk-averse – as distinct from risk-aware – mentality. In order to support the demand for information sharing with various maritime partners, U.S. maritime services will need to develop the capacity to provide mission-tailored information exchanges with their partners in all regions of the world, and U.S. information systems must be capable of fusing large amounts of data from disparate sources if they are to be effective.

The risks associated with information sharing – including the possible misuse or compromise of classified or sensitive information – must be considered when deciding whether to pursue a policy of robust information exchange. However, following a path of limited information sharing will have countervailing adverse effects, including limitations on the building of trust with potential coalition partners and correspondingly reduced opportunities to create or expand partnerships, which could negatively impact operational effectiveness.

Capability, capacity and risk implications – surveillance and reconnaissance. The players identified three important requirements of Surveillance and Reconnaissance (S&R) capability in particular. First, due to the potential lack of access to local land bases, the Navy must be equipped with sea-based or seaborne S&R platforms. Second, to be effective, these platforms must be capable of providing persistent S&R coverage and support. Third, to counter an effective anti-access threat or monitor activities well inland, they must be capable of conducting S&R at extended ranges from the target or area of interest. In terms of overall capacity, then, the U.S. requires sufficient sea-based S&R assets to support a conflict in which access to non-organic S&R support is severely limited due to local circumstances (for instance, lack of local basing rights).

The major risk in pursuing the expansion of sea-based S&R capabilities is the increased costs associated with the purchase, maintenance, and operation of additional ISR platforms and systems under fiscal constraints. Yet, in the event that joint and national collection assets are unable to provide vital intelligence, a failure to have invested in additional sea-based S&R assets could have dire consequences for the U.S. military's ability to accomplish its assigned missions.

Strategic communications

The Global participants defined strategic communications as the sum of all actions and messages (intentional and unintentional) influencing target audiences. For all futures, all of the cells considered effective strategic communications – and therefore the development and dissemination of coordinated and consistent strategic communications – integral to U.S. strategy.

The participants noted that action, inaction, and words all impart some message to some audience, regardless of intent. In a real sense, therefore, the U.S. is always engaged in strategic communications, albeit not invariably in a deliberate or coordinated manner. Due to the omnipresent nature of strategic communications, it is critical for the U.S. to

script the proper message and orchestrate its presentation to the appropriate audience to the greatest extent possible.

The absence of a deliberate substantive message and failure to coordinate its delivery with actions run a high risk of creating misperceptions in both intended and unintended audiences. To minimize such misperceptions, coordination between both internal (U.S. government) and external (partner country) parties is essential. The participants noted that in some cases American political leadership and U.S. agencies can operate at cross purposes. This could result from a lack of coordination, a failure to understand the message, or a failure to comprehend the communicative dimension of the actions themselves. For example, actions taken by the U.S. Navy, such as moving a ship or deploying multiple units to a given area, can convey an unintended message to some audiences. Straightforward communications stating U.S. intent through official press releases, among other things, can help mitigate this risk.

To enhance and inform the joint commander's ability to develop and deliver strategic communications, the Navy must have a culturally aware workforce to assist with the packaging and coordination of the message. In turn, to ensure the efficacy of strategic communications, that workforce must collect and assess feedback from both target and incidental audiences.

In the participants' view, the Navy must maintain the ability to develop and implement a standardized process at the Navy component commander level for effectively coordinating maritime actions and messages so as to convey consistent U.S. government purposes and objectives. A subsidiary requirement is the capability of understanding how audiences in all regions of the world are interpreting the actions and messages.

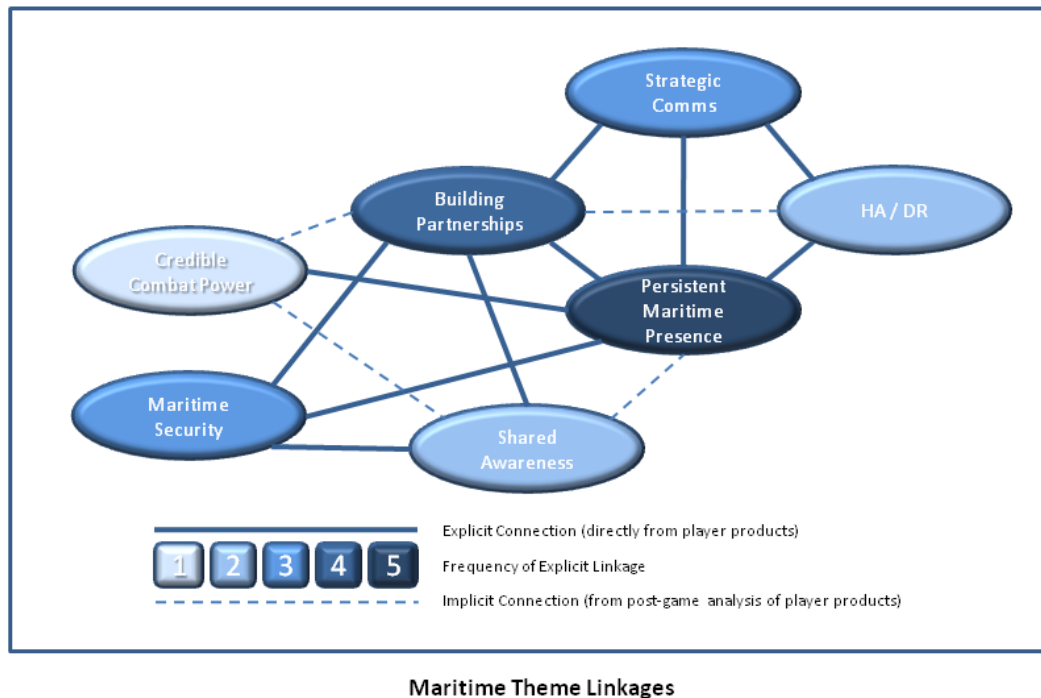
The risk associated with building these capabilities is that dedicated resources will be unavailable for other missions. If, however, the commitment to building these capabilities is halfhearted, uncoordinated messages will continue to hinder the attainment of U.S. government objectives.

Linkages

In identifying and developing the maritime themes through the examination of player-generated tasks and associated capabilities, the analysis team uncovered certain linkages among them. They characterized these linkages as either primary or secondary. A primary linkage was defined as a connection between two or more themes that was explicitly mentioned by the participants and recorded in the event data. A secondary linkage was defined as a connection that was either implied by the participants or inferred in post-event analysis. Note that a primary link is simply more explicit from participant-generated evidence than a secondary one; it is not necessarily more important or somehow weighted more heavily than a secondary link. Further, while there may be some form of causal relationship between themes (e.g., an increase in PMP may enhance the ability to execute HA/DR, or a decrease in partnership building may adversely impact shared awareness), such causal relationships are not always inherent in the linkages discussed here.

As the analytic team identified, discussed, and developed each maritime theme, it noted and graphically depicted direct (primary) or indirect (secondary) references to another

theme. This theme-by-theme approach enabled the analysts to build the link picture sequentially and gradually, rather than simultaneously embracing all the themes and hunting for connections, as the team felt that the latter approach risked generating “forced” connections – i.e., links that the analysts (or most military observers) believe exist on the basis of their experience and intuition, but might not have been supported by actual participant data. Accordingly, the fact that a seemingly obvious linkage goes unmentioned is not meant to imply its absence in the real world, but merely to reflect a lack of evidence in the data to support that linkage.



The single most linked theme was Persistent Maritime Presence (PMP). With five primary links and one secondary link, PMP connected to every other maritime theme. As previously discussed, PMP – the regular and sustained presence of forward deployed maritime forces – underpins the ability of a maritime force to respond to a wide variety of tasks in a timely fashion, deter adversaries, and reassure partners.

Building partnerships was a close second. With four primary and two secondary links, it too connected to all other themes, as the participants stressed the need to foster and maintain relationships across the full spectrum of maritime activities in order to create trust and effectively accomplish mutual maritime goals.

While credible combat power had the fewest number of primary links (one), it should not be interpreted as least important. This theme had the same total number of links as maritime security (three). In the alternative futures the participants were given, many of the issues generated were at the lower end of the range of military operations (e.g., law enforcement, anti-piracy, anti-terrorism, trade route security enforcement, and maritime infrastructure protection), with the higher end, combat operations, de-emphasized. Even so, credible combat power was still seen as critical to defeating anti-access strategies,

providing integrated air and missile defense, achieving sea control, and projecting power ashore.

Linkage with CS 21

The analysis looked at the degree to which the identified themes could be linked back to CS 21. CS 21 was a given at the beginning of event play – that is, it represented the dominant maritime strategy of the United States within the alternative futures. Thus, a high degree of linkage should be expected as an artifact of game design, and any broad conclusions based purely on apparent similarities between the maritime themes and CS 21 should be drawn with considerable caution. Nevertheless, the wide variety of participants with varying perspectives and priorities, coupled with the issue, task, and capability generation and independent clustering process, also could have resulted in a very different set of themes that diverged from CS 21 more than those generated in fact did. Four of the maritime themes mapped one-for-one with four of CS 21's six Expanded Core Capabilities. PMP corresponded to forward presence; credible combat power with deterrence, sea control, and power projection; maritime security with maritime security; and HA/DR with HA/DR. The other two Global '08 maritime themes substantially echoed CS 21's imperatives. Building partnerships matched up with "foster and sustain cooperative relationships with international powers" and shared awareness with "enhance awareness." In addition, PMP was consistent with CS 21's imperative to "limit regional conflicts with forward deployed forces," and credible combat power with its implementation priority of "decisive maritime power."

Linkages with plenary session briefs

In the course of the event, there were three plenary sessions. One at mid-event and a second at the end of the event end were conducted in the auditorium with all participants in attendance; a third, smaller session was held with U.S. flag and general officer participants and the Chief of Naval Operations (CNO) via video teleconference. Given the potential for the flag and general officers to draw different conclusions and stress different themes, the analysis focused on the alignment between the flag officer/general officer (FOGO) out-briefs and the maritime themes. Upon review of the briefs, seven plenary session themes were identified. They were strategic communications, building partnerships, shared awareness, HA/DR, gaining access, Global Fleet Station, and sea-basing.

The first four FOGO themes map directly to the analysis themes. The other three, gaining access, Global Fleet Station, and sea-basing, map somewhere between PMP and credible combat power (recall that a primary link joins these two themes). Accordingly, there were no "FOGO outliers" or participant themes that were discredited by the FOGO viewpoints.

Concepts discussion

Introduction

One of the goals for Global '08 was to evaluate the contributions of relevant joint and maritime concepts to CS 21 implementation. After reviewing existing concepts, the following were selected for examination:

- Naval Operations Concept 2008 (NOC) (draft version)
- Global Maritime Partnership (GMP)
- Global Fleet Station (GFS)
- Global Maritime Situational Awareness (GMSA)
- Long War Concept (LWC)
- Sea-basing Joint Integrating Concept (SB JIC)
- Irregular Warfare Joint Operating Concept (IW JOC)
- Capstone Concept for Joint Operations (CCJO)
- Military Contribution to Cooperative Security Joint Operating Concept (CS JOC)
- Military Support to Stabilization, Security, Transition, and Reconstruction Operations Joint Operating Concept (SSTRO JOC)
- Strategic Communication Joint Integrating Concept (SC JIC)

To familiarize the game participants with the selected concepts, the game designers used a three-pronged approach. First, all registered participants were provided with electronic copies of all releasable concept documents for familiarization prior to the game.¹ Second, in a video teleconference conducted during the week prior to the game, each concept subject matter expert (SME) provided a concept overview and fielded questions from the VTC audience. Finally, those participants unable to participate in the VTC were afforded additional training during three lunch-period “brown bag” briefings on the concepts during the game itself but prior to the concept examination activity.

Overview

Unfortunately, the concept evaluation activity did not go as smoothly as hoped, as many of the players were unfamiliar with the concepts that they were being asked to examine, both in scope and in detail. The level of unfamiliarity varied among players, as well as among cells, which lead to a disparity in the quality of concepts discussions conducted within the cells. Four cells (Africa, Global, Latin America, and North America) felt comfortable commenting on the concepts presented, while three cells (Asia-Pacific, Europe, and Middle East) did not.

¹ Those few For Official Use Only (FOUO) concept documents that could not be electronically released to non-U.S. government personnel were made available to all participants for reference during the event.

The three most robustly discussed concepts in the cells were the Sea-basing JIC, the Global Maritime Partnership concept, and the Irregular Warfare JOC.

The following is a cell-by-cell overview of concept evaluation efforts:

- *Africa Cell.* The draft 2008 Naval Operations Concept was well received in the Africa Cell. A discussion of possible GMP implementation challenges noted the potential absence of a common view among GMP participating countries of existing threats, challenges, and opportunities. This potential divergence suggested a need for regional, state-to-state, or even bilateral approaches for specifically addressing disparate threats, challenges, and opportunities. Participants also noted the positive aspect of a reduced footprint ashore associated with sea-basing, but expressed concern about the quality and capacity of sea and air ports in Africa to facilitate sea-basing. They also noted that sea-basing could have limited utility across the ROMO. Another constructive concept recommendation was to expand the current maritime-services' sea-basing focus to allow for the use of a sea base by non-maritime services such as the Army and Air Force.
- *Global Cell.* The Global Cell noted that the maritime tasks identified were well supported by today's concepts, with minor modifications needed. Regarding the Irregular Warfare (IW) JOC, the Global Cell recommended adopting terminology less confusing and contentious to non-DoD partners. Interagency, NGO, and international partners may have differing opinions and interpretations of some existing IW JOC terminology. Specifically, the IW JOC's reference to a "violent struggle" may cause certain other nations, NGOs, and international organizations to resist contributing to U.S.-supported IW efforts. The Global Cell recommended reconsidering the title and definition of the term "irregular warfare." Finally, the cell pointed out, with a note of caution, that the concepts assumed more maritime access than may actually exist in potential future scenarios. For example, the sea can only be used for maneuver if sea control has been established to facilitate access to a given area. The Global Cell also comprehended access more broadly than military access, to include diplomatic access.
- *Latin America Cell:* The GFS and SB JIC concepts were identified as key to the implementation of CS 21. The Latin America cell also considered the GMP concept, SC JIC, SSTRO JOC and IW JOC especially relevant to CS 21 implementation.
- *North America Cell:* The North America Cell comprehensively examined each of the concepts presented as they related to the five maritime tasks they had developed. GMSA was the one concept the North America Cell assessed as relevant to all five of their maritime tasks, though the cell participants noted no significant shortfalls or problematic issues with respect to any of the concepts presented. Given the nature of the region considered, however, the North America Cell recommended including existing homeland security and civil support concepts in the roster of those applicable to the implementation of CS 21.

To improve concept evaluation in subsequent events, game designers will consider alternative approaches, such as selecting a smaller number of concepts to be evaluated during the event and/or allowing each cell to focus on between one and three pre-assigned concepts based on their relevance to the cell and scenario. Additionally,

incorporation of a focused concepts overview session during the initial part of the event could help ensure that all participants possess a common baseline level of concepts understanding.

Additional observations

Aggregation – disaggregation

Global participants saw significant challenges, ranging from equipment to training, implicit in the requirement to disperse naval forces tailored for specific missions throughout a region and then quickly bringing them together in order to constitute credible combat power. For example, the required loadout for maritime forces conducting a theater security-cooperation mission is often different from the optimal combat loadout required to conduct single or multi-mission combat. Balancing between the optimums for the various potential missions at the start of a deployment therefore may require that any single mission loadout be sub-optimized. If the optimal combat loadout can be staged in theater for use as needed, then the ability to shift from one mission to another with optimal equipment becomes possible – though additional time may be required for rendezvous, swap-out, and proceeding to the next mission. The commander and his staff will have to employ operational art and consider the factors of time, space, and force to bring the most capable forces to bear on emerging missions.

The second challenge for the commander is training his forces to best perform their assigned missions. Most missions across the ROMO require that personnel be trained to a high level of proficiency. While the demands placed on personnel for maritime security, disaster relief, or humanitarian assistance missions may be comparable in degree to those for combat operations, they are certainly different in kind. Thus, naval forces must receive tailored training for each mission type that they are expected to encounter. This requirement raises several issues. How much additional time will be required to train personnel for the upcoming mission while shifting from one mission to another? Specifically, if platforms and personnel are required to shift from a given mission to their most demanding high-end major combat operations mission, how much time is required to “hone the edge” before they are ready for the high-end operations? An additional wrinkle in the practice/teamwork sphere arises when the re-aggregation of forces for a mission requires the addition of joint or coalition forces that were not part of pre-deployment training. Commanders must then consider the risk that disparate forces which have not trained together will lack operational coordination and could therefore jeopardize mission accomplishment.

Sea-basing

Participants defined “sea-basing” as “forces based at sea” in a manner consistent with the SB JIC. In this context, the best byword for forward-deployed maritime forces is “live nearby, and visit often.” Regional participants preferred to exploit the ability of U.S. maritime forces to operate from the sea to relieve local governments of pressure to grant them access in the form of shore basing rights. In some regions, Africa in particular, building partnerships initially through sea-basing could lead to basing rights ashore later. Elsewhere, in an anti-access environment created by a peer competitor, sea-based, long-

range penetrating ISR capabilities were determined to be critical to effective operations. In a third region, sea-based forces provided required credible combat power without the negative force-protection and strategic communication burdens that the land presence of U.S. forces in the region would impose. In each application, the participants saw the sovereign nature of the sea base as a plus.

“Whole of Government” approach

Participants felt that the U.S. government (USG) needed to do a much better job of executing strategic communications. Significantly, the foreign participants said that the USG “must have a strategic communications message,” but that the message was not effective because it was not coherent across the whole range of government functions – that is, the DIME. At the combatant commander level and above, including the DoD and the CNO, and all agencies and other departments, participants felt that the actions and words that comprise strategic communications were poorly aligned. Alignment of USG efforts would communicate a clearer message with no greater total investment than the current one, and, owing to synchronization, would facilitate the transmission of that message with greater efficiency and at lower cost. While the participants did not specify what mechanisms or processes would be required to achieve alignment across all government activities, a review of the various coordinative mechanisms used by the National Security Council since World War II and an assessment of their effectiveness in achieving alignment might be appropriate first steps.

At the naval component commander level, participants focused on the need for maritime forces to be aware of and in synch with the strategic communications plan of the combatant commander, and, implicitly, that of the USG. Awareness requires knowledge of the activities and messages presented by all elements of the USG and coalition partners. Synchronization requires incorporating strategic communication into the operations realm (N3/MOC) in advance, so that the strategic message transmitted with each employment of forces is considered prior to their actual movement. This is important because two maritime platforms – even where they both possess the capabilities relevant to the mission in question – may not send the same strategic message. For example, “white hulls” like hospital ships or U.S. Coast Guard cutters, carry different associations than “gray hulls” such as U.S. Navy amphibious ships. In considering actions and messages in tandem, the commander can ensure that a clear message is communicated before an ambiguous or potentially threatening movement of forces in order to prevent confusion on the part of the target audience and avoid general incoherence in strategic communications.

Incorporating a whole-of-government approach to maritime operations, and thus developing and implementing a coordinated strategic communications plan, will initially require additional investment in personnel and processes. Once a successful approach is established, however, the initial investment should produce savings by virtue of greater government-wide coherence and coordination and less duplication of effort.

Conclusions

Without question, the Global 2008 Title X War Game was an effective tool for exploring CS 21 implementation and provided valuable feedback from a wide array of participants. Though limited to examining futures that were principally shaped by only two key drivers, the players' discussions, activities, and briefs provided many valuable insights that should be considered by the U.S. maritime services as they work to implement CS 21 in the coming years. In particular, *the ability to generate regionally-focused, mission-tailored responsiveness* was identified as the key to successful execution of CS 21, and will have implications for the type and level of maritime capabilities that will be needed, both in the near term and in the foreseeable future. The game also highlighted the importance of effective strategic communications for CS 21 implementation, for while CS 21 provides the maritime foundation, a coordinated, comprehensive "whole of government" approach to framing the maritime strategy will be required for success.

While the Global 2008 War Game was an important step in aligning imperatives, confirming priorities, and fleshing out the expanded core capabilities of CS 21, its outputs should not be deemed simply to be endpoints of a project timeline. Indeed, the gaming process itself should be viewed as a feedback loop, with participant inputs, clustering exercises, plenary out-briefs, and post-event analysis all serving as vital and dynamic aspects of the CS 21 execution and force-shaping process.

Appendix A: Cell-by-Cell discussions

There were seven cells in GLOBAL 08. Each cell was given one of the four Alternative Futures as a baseline for discussion. Six of the seven were regionally based: Africa, Asia-Pacific, Europe, Latin America, Middle East and Central Asia, and North America. These cells were chartered to look at issues from a regional focus, and included representatives from countries located in the region. The seventh cell was a Global cell that looked at issues across all regions.

All cells used similar methodologies as described in the main section of this report, although there were individual variations in how these methodologies were executed. All cells were predominantly composed of serving U.S. military officers or defense-oriented civilian representatives. There were representatives from other government agencies, non-governmental organizations, and other nations were present as well. By design, each regional cell contained a broad range of both functional and regional expertise and perspectives. The Global cell differed in its composition as explained in the below cell-specific section.

This appendix reflects the issues raised by each cell, looking at several areas of discussion in the same general order as covered in the cell. These areas are:

- *Regional Perspectives* (Background PMESII – Political, Military, Economic, Social, Infrastructure, and Informational – issues) flowing from the Alternative Future assigned
- *Regional Issues* as defined by the particular Alternative Future and the regional implications of that future discussed above
- The *Maritime Tasks* consistent with those regional issues
- The *Maritime Capabilities* necessary to meet those regional tasks

Each of these discussions naturally flowed from, and built upon, the discussions that came before. Note, however, that due to constraints of the format, it was often impossible to fully vet the language as used during the clustering process in the way originally intended, i.e., to produce English declarative sentences. The end result was that sometimes the terminology in each cell became somewhat lax.

It is also important to remember that the Regional Perspectives and Issues – and hence all of the output downstream from these initial discussions – were heavily influenced by the going-in assumptions postulated in each cell's Alternative Future. Keeping this in mind will help maintain clarity between both inputs and outputs within the respective areas.

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Africa Cell

The Africa cell consisted of a broad spectrum of experience from the DoD, U.S. Government, Non-Governmental Organizations (NGO's), academia, and representatives from Nigeria, Ghana and Cameroon.

The Africa cell was presented with the "Tri-Polar" Alternative Future. (Extremism: Disempowered/ Passive (i.e. low); Resource Rivalry: Hyper competitive (i.e. high))

There was some pushback by most of the cell on how the world got to this point and several hours were spent addressing issues not covered by the scenario.

The African representatives started to inject their thoughts into the process early. While it took some time for them to gain recognition and consideration with the rest of the group, their themes remained constant and began to influence the U.S. personnel in the cell.

Regional Perspectives

Political: Much of the early discussion was driven by U.S. personnel with very little thought given to the African representatives in the cell. The discussion revolved around the impact of the Tri-polar “powers” and their impact/influence on the continent. The continent was typically described as an object to be parsed and exploited. The African representatives introduced themes that would remain constant through the week but did not seem to register on day one.

These themes include:

- Africa should not be treated as a unified continent. There will be continued factionalization, with more (or at least sustained) inter-state rivalry
- The continent will still require much external help
- The level of an external country's influence and access will depend on their level of acceptance by the peoples of Africa
- Careful review of the continent's many varied cultures and governments would prove critical to a U.S. Government and Navy unified engagement plan

Several other countries were mentioned during the discussion. India was viewed as a potential partner, Russia as a potential spoiler, and the UK and Japan as having great potential for influence but with a currently undefined role.

Military: There are many opportunities for mil-to-mil relations, but the U.S. Africa Command, AFRICOM, has not been well received according to the representatives from Africa. As a result, the impact of AFRICOM is uncertain. African priorities are likely to remain focused on ground forces. It is expected that conflicts over local resources will intensify as global conditions deteriorate.

Economic: In the context of the Tri-Polar world as well as the current environment, Africa will be seen as a major source of raw materials (especially hydrocarbons) and cheap labor (which will attract global manufacturing). The African representatives

stressed that the nation that helped African nations address their many needs would benefit by way of access to resources and political cooperation.

One participant stressed U.S. energy independence and continued the point throughout the week. He felt that if the U.S. were energy independent, our political influence and interaction would be viewed with less suspicion. Also, corruption was viewed by the participants as endemic within Africa, and impacting the rule of law.

Social: The social discussion was very general. In this scenario, the impact of Islamism is indeterminate, but terrorism appears to be minimal. Nationalism is likely to increase; the impact of HIV/AIDS and malaria was indeterminate but assumed to be negative. Education levels and the standard of living will remain constant where energy is prevalent, but will decrease in energy-poor areas.

Infrastructure: Infrastructure in the region was described as weak, but improving, especially in areas with natural resources. It was expected that there would be major regional transport hubs under the control of the three major powers postulated in the scenario, with substantial urban sprawl and rich city centers focused on these transportation hubs.

During this session, one of the African country representatives described a situation within his country that impacts the U.S. on multiple fronts, and that resonated with all the cell members: an un-named oil company has a refinery, with lights that can be seen for miles and paved roads, but the surrounding towns do not benefit from this same infrastructure. This does not play well with the locals and costs the U.S. public relations points. On the other hand, if the Chinese build infrastructure that benefits both the Chinese and the African nations, and the U.S. does not, we should not be surprised who gets access to the resources of Africa.

Information: Like the rest of the world, access to information is causing the nations of Africa to question their current standard of living/education/politics and to question why and to whom they grant access to their resources. Expanding use of the internet and cell phones helps to transcend local isolation and poor terrestrial infrastructure but at the same time access to information is splintered, with information over official channels propagandized, biased and incomplete.

Regional Issues

After the Regional Perspectives were discussed, the cell was asked to derive Regional Issues, which were clustered into the following groups.

Prevent & Prevail: There were serious discussions on the type, number and focus of naval forces operating in and around Africa. A prevail force is different from a prevent force. A prevail force can execute a prevent mission, but a prevent force cannot execute a prevail mission.

Influence & Access: The African representatives told the cell that they did not want a large U.S. presence (i.e. basing) within their borders. They used the Horn of Africa (HOA) as an example of a U.S. presence that was perceived as providing little value to the region. Perception is reality. The region sees piracy as a major issue. Regardless of the stated mission of HOA area forces, the U.S. is seen as sitting idle as pirates run

rampant in and around Somalia. Seabasing was seen as a valuable capability that the U.S. Navy should invest in as a means to generate influence and access.

Resource Competition: U.S. Navy assistance in developing African nation's naval capability would help the nations secure access to resources, improve the region's ability to react to issues such as proliferation and piracy issues, improve Maritime Domain Awareness (MDA) for the U.S. and improve the perception of the U.S. in Africa.

Energy Independence: As stated above, one of the participants was adamant about the U.S. becoming energy independent. While it was recognized that such a national effort is beyond the scope of the Chief of Naval Operations (CNO), the CNO can alter the ship building plan to take advantage of alternate fuel/propulsion technology. Most of the cell agreed with this participant's premise.

Human Security: Looking after basic human needs and establishing conditions for improving beyond the basics were important. The discussion (led by one of the African country representatives) centered on relationships based on covenant. The covenant must be a long term commitment. Human security depends upon our economic, political and military policies combined with actions that will assist African nations in securing human security.

Regional Cooperation: The discussion centered on the Africa Union (AU) rapid reaction force with the U.S. Navy having a role in broadening the view of the AU participants from a ground centric capability to a regional combined arms air, land, and sea capability.

Institutional Strengthening: The discussion centered on the benefits of a U.S. policy that looked to cooperation and a focus on what was good for Africa, as the players felt the U.S. would subsequently gain access and influence in Africa.

Great Power Competition: The discussion centered on how the competing powers would be vying for influence and access. The African representatives stated that U.S. access would depend heavily on U.S. Navy access as part of a coordinated U.S. policy. A U.S. Navy seabasing capability would be beneficial in that it would limit our footprint ashore while still allowing mil-to-mil cooperation.

Tri-Polar Cooperation: The cell debated the level of cooperation between the major powers in the tri-polar scenario. Most felt the scenario was unrealistic, but in accepting it, felt that Africa would not require a military prevail capability.

Maritime Tasks

By the time the cell started discussing Maritime Tasks, the U.S. participants had begun listening to the Africa representatives. The discussion centered on the U.S. ability to foster development in Africa across the PMESII spectrum in order to build indigenous capacity.

The Maritime Tasks were clustered into groups, which are discussed below. Several of the task groups were singled out by the Control Cell for further examination in the

Maritime Task Analysis phase.² As with other cells, this raised some consternation in the Africa cell.

Forward Maritime Presence: This was seen as critical amongst the U.S. personnel, but the discussion highlighted many good and bad effects of a large presence. Individual comments: – Conduct Forward Presence to reassure allies, assuage the non-aligned, entice new allies, and deter/respond/prevail against other blocs. Forward Presence must be tied to comprehensive U.S. DIME (Diplomatic, Information, Military, and Economic) campaign. U.S. Forward Presence could have a negative impact on U.S. goals if the strategic communications message fails with the locals, because “Lack of understanding of local traditions, circumstances could cause resentments.”

A major issue for the Navy is the dispersed fleet concept. The Navy has current command and control issues and will need to "place a lot of smart people in the room" in order to work out the reality of taking a dispersed fleet and aggregating it to create credible combat power for a prevail scenario. A sea-based force was seen as a good capability by the African representatives because the U.S. presence was off shore.³

Maritime Security Force Assistance: This was the number one priority of the African representatives. The African representatives felt there was a lack of U.S. Navy presence in Africa. The cell had a big discussion about helping the nations build maritime capacity. If we help them develop a maritime infrastructure (both Coast Guard and Navy) it will have a huge impact on the long-term development of the nation because of the second and third order effects on infrastructure, education, institutional and bureaucratic development, et cetera. It will also possibly allow the U.S. Navy to reduce its Operations Tempo (OPTEMPO) in the region, while gaining allies that help us maintain Maritime Domain Awareness and respond to issues.

Regional Cooperation: Using an ink blot approach, the nations of Africa would be much more inclined toward relations with the U.S. if they saw that we valued their issues and goals in the same light as ours. Other regional nations would be more inclined to interact with the U.S. They want to know that we share their values, et cetera. One example given was that if the African nation values getting a road, we should value them getting a road, too.

Regional Center of Excellence: The U.S. understanding of the region, even at the State Department, is severely inadequate. The Navy should invest in a process that overcomes this deficiency of understanding. The cell embraced the one African representative's suggestion that the U.S. develop alliances of covenant, not conveniences, which in turn would require U.S. DoD/DoS to have more regional knowledge about the culture, customs, etc. of Africa. It was felt that if the U.S. fails to develop this knowledge we will cede the advantage to other powers across the globe that will.

² Due to time constraints the Control Cell prioritized the master task cluster for each cell to ensure that a wide range of tasks were examined during the game.

³ As discussed elsewhere, the term that was used for "sea-based forces" was "seabasing," but they did not mean the full range of capabilities as assumed by the Seabasing JIC.

Maritime Safety and Security Operations: The majority of the group, particularly the African partners and DoS representative, felt that maritime safety was poor and occurred only when strong international presence in the area existed. It was also stated that maritime security was “fleeting” and needed improvement and persistence to help aid Africa in stabilizing commerce.

Strategic Communications: These were viewed as the key to any future contact for the U.S. not just the DoD.

Maritime Domain Awareness: MDA was seen as critical by the U.S., but not by the African representatives. The latter stressed that if the U.S. Navy followed through with Regional Center of Excellence and nation capacity building, the result will be partners that will assist the U.S. Navy in building and maintaining MDA. The cell spent a lot of time talking about expectation management and the implications of its maintenance and dissemination.

Maritime Capabilities

The next step was to convert the Maritime Tasks into Maritime Capabilities. This step generated some pushback from the participants as to the utility of further clustering drills.

After clustering, the clusters were ranked and Persistent Presence was ranked number one, much to the dismay of the African representatives, who believed that Train/Advise/Assist and Partnership should have been ranked higher

Persistent Presence: Despite not viewing it as the top priority, the African representatives like this, described the Navy as the ‘cop on the beat’ – you always know they are nearby. The cell felt this was a good way to demonstrate that Africa is important to the U.S.

Train, Advise and Assist: Within the Tri-Polar scenario, the U.S. Navy’s ability to help nations and regions increases their capacity through mil-to-mil cooperation.

Partnership: A naval partnership was seen as a good inroad into further cooperation with African nations. Many of the participants felt that it is easier to address issues in the maritime realm. Cooperation on land requires a different type of commitment/presence that most African nations do not want because of their history.

Ballistic Missile Defense: This was seen as a major requirement in the cell by some of the DoD personnel and the Non-DoD / non-U.S. personnel did not push back. During the discussion, the need for BMD sprung from the lack of clarity/understanding within the scenario so the requirement was deemed necessary.

Maritime Situational Awareness: The African representatives felt that partnership and assistance would enable better regional understanding and awareness realized through their increased naval capacity, thus saving the U.S. Navy money.

Prevail: The African representatives felt that the U.S. representatives were looking at Africa as a place of conflict only. The perception is that China, EU and India are already present and helping to improve Africa.

Many felt that credible combat power should be the focus, and the U.S. Navy would use that power 90% of the time as soft power with it ready for Major Combat Operations (MCO). The African representatives wanted to know “where is the target” in Africa that

the U.S. would want to hit. The comment silenced the U.S. military crowd. The definition of prevail was discussed. If you win heart and minds you might not have to win in the conventional sense of prevail.

Seabasing: Seabasing (see caveat regarding terminology footnoted earlier) was seen as a good capability to establish mil-to-mil cooperation without a large ground footprint. Basing rights would probably follow.

Interdiction Operations: The African representatives as a whole felt that interdiction operations by "outside Africa" Naval powers were unwelcome. Africa, they suggested, "should be viewed as a house and that the U.S. should view Africa as how they can help repair the house and not dominate it. Africa does not want to be dominated by an outside power."

Coastal River Operations: The African representatives felt this was a good tool, because the average African nation will not build a navy that is anywhere close to the capability of the U.S. Navy. Helping them with Title 10 functions for a coastal, river focused navy/coast guard would help them.

Asia-Pacific Cell

The Asia-Pacific cell consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, academia, and representatives from Australia, India, Japan, Singapore, and South Korea.

The Asia-Pacific cell was presented with the "Made in East Asia" Alternative Future. (Extremism: Disempowered/ Passive (i.e. low); Resource Rivalry: Collaborative (i.e. low))

Regional Perspectives

Political: The cell members saw this alternative future as presenting an increase in China's influence on regional states. This was coupled with a decrease in U.S. influence in East Asia and a strengthening of East Asian institutions. They also saw an increase in cooperation between the U.S and South Asia. The scenario was viewed as largely benevolent, with environment, energy, and health cooperation (prevention of disruption) critical to maintaining those benevolent aspects.

Military: Although the scenario was viewed as benign and cooperative, it was also viewed as potentially volatile, with International Military Education and Training (IMET), Foreign Military Sales (FMS), and other traditional tools reduced due to financial constraints and perceived utility. Force structure might shift toward Intelligence, Surveillance and Reconnaissance (ISR) and submarines, as well as other systems to neutralize anti-access threats.

Economic: Regional integration will be strengthened. West to East trade through the Indian Ocean will increase, leading to security issues in South and South-East Asia. SE Asia becomes a zone of competition between China and India. Competition for African resources could destabilize order.

Social: Rising ocean levels will result in migration flows and could cause instability, especially in smaller, coastal states. Aging populations, pollution-related and pandemic

illnesses, and skewed demographics will strain domestic politics and support systems. Immigration concerns will be exacerbated by competition for labor. Overall, though, the scenario implies that previous decades' engagement policy largely worked.

Infrastructure: Commercial maritime interests and use will increase. Skewed demographics and aging populations will place demands on domestic resources. At the same time, the oceans are under increasing strain, and are perhaps dying, potentially resulting in a competition for food resources.

Information: The scenario implies the Global Information Grid (GIG) in Pacific Rim has been realized, but military demand for bandwidth may decrease. The scenario also implies China has fully joined the internet. Trade competition will be in the form of competition for influence on blocks of labor.

Regional Issues

As a whole, the event participants were very active in this phase of the event. The cell moderator was able to engage cell players and stimulate creative thought. As a result, a solid collection of regional issues were identified and reflected as a series of declarative statements.

Security through Partnerships: Political and diplomatic efforts will need to be emphasized to maintain cooperation between countries. Partnerships are essential, reaffirming that we cannot do it alone. We have to prepare ourselves to deal with our partners. We must educate our maritime staff personnel in regional culture to effectively create relationships. Information / idea exchange is a two-way street. We must establish mutual security assistance programs. The byproduct of "Security through Partnership" is expanded access on many levels, which has large peacetime/pre-conflict implications.

Ensuring Open Access to the Sea (including the Arctic): Universal access to the Arctic is a must, but how do countries agree to universal access, and who will maintain this access for everyone? Protection of merchant shipping will be critical. We need to foster trust, and conduct security assistance programs in order to coordinate maritime operations / to enhance maritime capabilities. We must prevent disruption to sea lanes of communication (SLOCs). We must enhance counter anti-access capabilities in order to deter and react to potential disruptions from radicalized political Islamic states, and assure access for cooperative intervention. We must maintain capacity for assured access to intervene in regional conflict between smaller states. We must also re-evaluate international agreements on Law of the Sea and Admiralty Law in order to ensure access and freedom of navigation (FON) – such agreements provide the horse-power behind enforcement.

Merchants can go anywhere essentially without issue, but when a military vessel does this, it can send a different message to the world. The legal framework is crucial, so we need to ensure legal framework for military access to enhance global distribution of forces. We must clarify rules of transit in Arctic sea lanes and other narrow seas in order to promote commerce and to prevent conflict. We must conduct ice-breaking to maintain open sea lanes, and create partnerships to allocate access-oriented tasks such as ice-breaking. We need to build capacity in coastal states in order to enable them to provide the governance and ability to enforce the appropriate international laws.

Maintaining Military and Economic Access: National competition cannot be taken out of the equation; even if everyone is enjoying a rather good quality of life, a level of national competition still exists. Disruptions (e.g., a pandemic) cannot be tolerated in order to maintain cooperation and competition. We need to ensure good connectivity / information exchange between navies in order to achieve a common operating picture. The Global Information Grid supports this need for global communications. We must control illegal activity in order to prevent disruptions to commerce.

We may need the capability to conduct SLOC interdiction. Therefore, we should develop and employ SLOC interdiction capability in order to deter SLOC/strait closure.

We should develop a comprehensive system of ship tracking (much like what Maersk does today for container shipping and tracking as well as Automatic Identification System AIS) in order to ensure secure shipping.

Manage assignment and scope of Security Roles: The U.S. no longer needs to serve in the role as the universal cop. The privatizing of security can offer more robust coverage than the military can. If there is a need and a profit motive, then business can step in and fill this role of privatized security. The trade vector west to east will grow. This will result in security issues in Southeast Asia.

Dominance is not needed to maintain or conduct situational awareness. If you give up or lose dominance, you still need to maintain homeland defense and deterrence.

Managing Relationship with PRC: Educational competitiveness is a challenge. How does the U.S. maintain relationships/(e.g., U.S.-China) when interests between countries differ?

Management of Resources (including People) in a Changing Climate: Everyone is looking at Africa as a wealth of resources to be tapped. We need integrated agencies (inter-agencies) help to prioritize resources, provide better programs, provide better messaging, improve planning, et cetera.

Hedge against Space-Based Vulnerability: A cooperative scenario can actually lead to stronger militaries and other forms of competition such as the need to gather information on other countries to safeguard their own interests (protectionism). This can result in greater ISR activities, the building of more collection platforms (subs and ships, etc.).

Maintain Competitive Economic Advantage: SE Asia becomes a zone of trade competition between China and India. To keep growing, more people are needed and this will result in a competition for labor. So, immigration will become more of an issue.

Save the World: Rising sea level (due to continuing global warming) can impact the stability of island states and coastal nations. Climate change may lead to threats to governance; this environmental issue can be a destabilizing force, causing changes in agricultural methods, affecting water resources, and more. Rising world populations can be a destabilizing force, also a challenge to the issue of governance.

American Identity: U.S. hedging continues. Europe-Asia (EA) cooperation is up and U.S. access is down. U.S. economic resources are more constrained. This also pertains to the U.S. military complex.

Maritime Tasks

Influence At-Risk Populations: Sea-basing is a key enabler. The U.S. needs to develop a CONOPS for sea-basing.

Maritime Networking: Network warfare and defense is critical to platform survivability. It is expensive, but a necessary and fundamental investment. Knowledge management is important and it must be judged/validated for accuracy. Networking is not only wires, but also the organizations and information flow. This applies at every level of interaction we have with the world.

Getting Ships Through: (No amplifying comments were provided by the cell participants)

Confidence Building Measures: We must work through partners. But the downside of involving too many participants may result in the lowest common denominator concept. This erodes the power and influence of the UN, and if UN is diluted it will lose its significance. Reputation is key – you cannot afford to lose your reputation. Once you lose your reputation you lose your ability to influence.

Sea-basing has always allowed us to project power. Seabasing is for projecting power ashore (sometimes for military economic reasons, sometimes for Humanitarian Assistance / Disaster Relief (HA/DR)). Our focus has always been on power not influence. Influence is something we should not overlook. For example, Osama Bin Laden used his influence to develop a mass following and powerful threat that has tied up our military to a significant degree.

Comprehensive Stakeholder Coordination: The Navy needs to continue to pursue jointness, inter-agency relation-building, partnering, et cetera. U.S. leadership (i.e., the CNO) needs to know we cannot do it alone and therefore must act accordingly.

Coordinate Maritime Command and Control: Our Command and Control is still quite primitive. The technical state-of-the-art is low. It is an unnatural act to involve partners in Command and Control (C2). The British were included in the U.S. system of C2 only recently. It is utopian to think we can have a perfect common organizational structure for all partners; however, we can always work out the differences and accomplish the mission.

Strategic communications will always present a challenge, but as long as the intent remains steady, the mission can be realized. Patience and flexibility are needed. The intent is right, as seen by most people, stay on message. Most effective strategic communications are internal *and* external. The challenge is to simplify strategic communications, but we are not doing it. It is so easy to misinterpret language, symbols, et cetera. A constant need for clarification is necessary to ensure the correct messages are communicated.

Enhance and Enable Governance: (No amplifying comments were provided by the cell participants)

Legal Frameworks: (No amplifying comments were provided by the cell participants)

Hedging: The physical presence of the U.S. is critical to influencing the outcomes of events. Persistence of presence (i.e., via fleet exercises, etc.) is important. We see

China's influence growing and U.S. needs to remain strong to serve as a counter-balancing force.

U.S. power will shape the future. A peaceful situation does not come easily. Current peace depends on U.S. power dominance. Looks like U.S. is reducing labor forces and partnering with coalition forces. This may not be a good thing. The U.S. reduction in forces could allow other nations (e.g., China) to gain dominance. U.S. must prepare forces to maintain dominance to ensure world stability. Current U.S. maritime strategy may lead to some level of destabilization in the future. Confidence is based on availability and reliability of powerful forces. The U.S. needs to remain strong so that other allies remain confident in the U.S. and its ability to maintain stability in the world. The U.S. needs to lead in research and development in order to keep the edge and to remain strong.

Maintain Access: The arctic is a cheaper way to move goods and has strategic importance.

The U.S. is in an awkward strategic situation. Our presence in the Asia-Pacific theater is much diminished. Access becomes more difficult to define and maintain due to a lessened capability of our fleet to project power and make a difference. We had no competitors in the early 1990s, and "Forward From the Sea" reflects that. The world in 2025 is more akin to the cold war era where access cannot be taken for granted. It may be expensive to have forward deployed forces (ships); however, not having forward deployed forces could be even more expensive (an opportunity cost) in the big picture of maintaining access.

Doing nothing would make the U.S. more dependent on China. On the other hand, it was argued, economic / business endeavors, not the military actions, are the keys to gaining access.

Receive Security Assistance: Partnerships can make the world function more effectively to derive the necessary maritime security.

Maritime Capabilities

Influencing At-Risk Populations: We need to have the ability to shape perceptions and responses. We need the ability to maintain logistics support without overseas bases. Support distributed and diverse forces. Forces can vary in size and shape to support diverse missions. Support could come from a variety of sources, even the Chinese. Support infrastructure is required.

Burden sharing is important to achieve robust support. Building partnerships is crucial, especially the incorporation of local support to overcome language barriers, understand the local culture, et cetera.

We need to improve interagency flow both at headquarters and in the field. Public affairs people, translators and other embassy representatives (personnel with specialized skills) are critical to forward deployed functionality, so that we may communicate strategically in the local language. But the Department of State has a 13% shortfall in manning overseas billets. In short, some agencies are not adequately staffed to meet growing demands.

The U.S. Navy is unique in its ability to provide forward-deployed support anywhere in the world. But ships have very limited capacity to “house” additional people. The Navy needs to think through these needs and how they can effectively contribute to the mission. During hurricane Katrina, DoD worked with Federal Emergency Management Agency (FEMA) on relief operations. It was suggested that we should activate troop ships to help house displaced victims. In short, other agencies can team to accomplish a mission. Not just Seabees coming and drilling, but grass roots involvement (including being sensitive to culture) is the way to go. Interagency involvement is getting better and the military has always been there doing what they are told.

Agencies like the State Department will expand into these missions, not as a matter of exception. Shipboard berthing is a constraining element, different not just culturally, but physically as well. We need to have the ability to shape perception and responses of “at risk populations,” state and non-state actors.

Maritime Networking: We need to deploy language and culturally trained people to establish human networks, and develop a system to prioritize and develop burden-sharing schema. Prioritize gathered information and share it with relevant people/platforms. We need a capability to identify and physically mitigate threats, including threats from cargo and economic trade. This involves Customs, Department of Homeland Security (DHS), U.S. Coast Guard, and other agencies that are big participants in this mission of maritime networking.

Unity in command (versus stitching together a number of diverse agencies/organizations) provides coherence and cohesiveness. But unity of community vice unity of command may be a better way to look at it. Command may be less important than coordination of efforts. The downside of this concept is that some people may not feel obligated to follow the direction given from another organization, so a good solution is to have a commander in charge that is dual-hatted. An example would be a military commander who can control / lead the military constituency and also be legislated to have civilian control over non-military agencies participating in a given mission.

Getting the Ships Through: We need to monitor SLOCS and identify activities that are restrictive to freedom of movement and maneuver, mitigate effects of subsurface, surface, or air threats across the Area of Responsibility (AOR). Mitigating does not always mean defensive weapon systems. Mitigation has an engagement piece, too, where you reach out to the enemy. We need to identify the threats first. Failing that, we need the ability to engage fixed and mobile threats that deny access to the AOR. We need to sustain the force through expeditionary, at-sea forces, and maintain and defend information networks that support freedom of movement / access. We need to develop capability to remove wrecks and Hazardous Material (HAZMAT) spills in SLOCS if/when they occur.

Confidence/Influence Building: We need to share Maritime Domain Awareness continually to build confidence and increased security in near-real time, especially with key users such as those countries that have significant portion of sea-going trade. But we need to build trust first before you can exchange MDA, and be careful with whom you share this information. We need to be able to integrate existing systems. We need the ability to exchange subject matter experts (SMEs) with partners in order to enhance common concerns and enhance partner capabilities. We should undertake bilateral

activities such as International Military Education and Training (IMET) and Foreign Military Sales (FMS) to counter-balance regional threats.

Comprehensive Stakeholder Coordination: We need robust collaboration with the shipping industry, partnering for two-way information flow regarding security concerns. We need credible deterrence (available fire power / intelligence / non-kinetic fire power / etc.) in order to control and deter potential disruptive actors. We must defeat the threat by preventing close-in engagement. We should undertake joint exercises with comprehensive participation. We need the ability to organize for regular exchange of info and viewpoints in order to enhance the achievement of respective national, interagency, NGO, and stakeholder priorities.

Coordinate Maritime C2: We need to equip, train, and maintain interoperable communication capability and networks. There is a real tension between what we say we can do and what we really do. We need to be honest with ourselves and perhaps re-evaluate the objectives of our strategy. We need to be able to conduct real time mission-focused communications with partners, and to execute PPR (Pre-Planned Responses) with partners at sea.

Enhance & Enable Governance: We need the capability to provide rapid response to assess requirements for Humanitarian Assistance/Disaster Relief, and be able to provide persistent HA/DR services from the sea. We need the ability to interdict suspect vessels in SLOCS and in waters of national interest, such as fishing areas. We need to develop an ability to defend shore facilities against threats, and an ability to deter/dissuade major disruptions and disturbances to governance with the presence of credible combat power. Combat power presence can sustain a cooperative environment. (We should keep in mind, however, that dissuasion is a double edged sword because it makes enemies become more creative in threatening/attacking us (e.g., Improvised Explosive Devices (IEDs), diesel subs, et cetera.) It might be hard for navy to come to grip with this capability since so many agencies are involved and interdependent.

Maintain Access: We must maintain global access via partnerships, C2, and maneuverability, and protect and support the force that maintains access. (The use of force was highly debated in the cell. Some agreed that you need a big stick, medium stick, and a small stick/Swiss army knife. There was some agreement that you do not want to destroy the village, but keep it from needing to be addressed in the first place.) We need to be prepared to use force to ensure Freedom of Navigation. Maneuvering for the sake of maneuvering can highlight presence.

Europe Cell

The Europe cell consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, academia, and representatives from Italy, Turkey, and the United Kingdom.

The Europe cell was presented with the "United We Stand" Alternative Future. (Extremism: Super empowered Militant (i.e. high); Resource Rivalry: Collaborative (i.e. low))

There was some pushback by many of the cell participants regarding how the world got to this point (most objections summed up as “you can’t get there from here”, despite direction from the moderator to “parachute” into the scenario as given), though the majority of the participants recognized that their tasking was to develop the scenario and make assumptions based on their judgment.

The group, while initially careful to state their opinions so as not to cause too much dissent, rapidly progressed to detailed discussions about some of the assumptions. The moderator occasionally redirected the conversation if he felt the participants were “digging too deep” on a particular point. While the PMESII list formed fairly rapidly, the most significant discussion revolved around three major points:

- Definition of “Haves” and “Have-Nots” as a binary classification for states in a non-petroleum-dependent world; using the term “developed” instead of “Western” to indicate the “Haves.”
- Description of the role of the U.S. in this collaborative resource rivalry – whether the U.S. was leading the way (active followership), or “dragging the rest along.”
- Implications of a world thus reorganized into “Haves” and “Have-Nots” – defining economic and political impact of the formation of two disparate factions and the relationship between them.

Regional Perspectives

Political: Political rivalry will continue, between independent “Haves.” Some Inter-Governmental Organizations (IGOs) and NGOs, including the United Nations and the European Union, will be strengthened. IGO “Losers” will be those who attempt to keep “Haves” influence out.

Oil producing countries will lose political influence. Russia in particular would be a huge loser, becoming more politically unstable due to a decline in petroleum income. However, Russia has an abundance of other natural resources. The uncertainty over the amount and importance of these resources causes Russia’s future to be uncertain; the degree to which Russia is a “Have-Not” in this world is indeterminate. Former oil producers who possess Weapons of Mass Destruction (WMD) or Irregular Warfare capabilities may either export their capabilities, or judiciously use them to regain power.

Eastern Europe neither gains nor loses overall, and makes continued attempts to join with Western Europe.

“Haves” will achieve greater independence from reliance on other nations. “Haves” will be more willing to expand security and work with “Have-Nots” in order to improve stability. The “Losers” may unify into their own Political Bloc, or remain separated by ideologies.

Military: Militaries will become more involved in Irregular Warfare, Foreign Internal Defense, and Precision Strike. Anti-terror, counter-terror, counter-piracy, and policing-type activities will increase. Security requirements for new SLOCs may emerge (due to new resource regions). Expanded merchant shipping will adversely impact “Western” Navies because of increased escort requirements. Civil-Military operations will increase.

The Ukraine and Caucasus will no longer be a significant national interest to the U.S., due to decreasing U.S. need for oil; however, U.S. still needs these regions as trade partners, and as markets for goods and services.

Economic: Replacement of petroleum will create new resource commodities. With petroleum no longer a competition concern, competition will simply shift to whichever resource is next most important and/or scarce (water, food, or other minerals, for example). Central Asian nations and the Caucasus lose due to shift away from petroleum products, although former petroleum-producing regions still represent important trading partners to “Western” economies for new technologies, goods, and services.

Cheap energy will globalize industrial production because transportation costs are moderate. “Western” world should invest heavily in the under-developed world to improve standards for “Have-Nots”, creating a more peaceful environment world-wide. An attack against containerized cargo will cause significant economic disruptions.

Social: Immigration to Europe will increase. While desirable, the quality of the immigrants must be controlled. Illegal immigration will increase, as the “Have-Nots” try to get to areas where the “Haves” live. Globalization increases challenges to national identity; groups will attempt to retain their original identity in a globalized world.

Chemical and Biological capabilities will increase as the “Have-Nots” strike back. Tribal groups become more irrational in their actions and lash out with greater frequency. Tribal rivalries may lead to disintegration of states. Globalization leads to increased criminality.

Infrastructure: New SLOCs with new choke points may develop as resource shifts occur. Global shipping increases due to access to relatively inexpensive petroleum products. Industrial production is outsourced to “regional manufacturing centers” due to access to cost-efficient transportation.

Information: Globalization leads to rapid spread of info about “Haves” vs. “Have-Nots.” This empowers radical elements (due to ease of connectivity), while uneven access to global connectivity may prevent under-developed elements from uniting or improving their conditions. On the other hand, access to information drives the cost of education down, benefitting the “Have-Nots.”

Regional Issues

The session for development of regional issues was productive, with very little moderation required; the group produced a relatively comprehensive list of issues quickly, with only minor sidebars. The clustering exercise did not proceed initially as was described in the pre-brief (discussion among participants, while it was clustering, there was no guidance as to limits on issues in a cluster), but the clustering itself seemed effective.

Natural Disaster Response: Opportunities and threats are raised by climate change. Natural and man-made (e.g., WMD) disasters will kill people, impact economies, create social stress, and create the need for Consequence Management.

Legitimate Use of International LOCs: Growing demand for immigration to developed countries resulting from an inability and unwillingness of "Have-Not" countries to accommodate their populations. Due to expanding globalization and maritime shipping impact on global economy, combating piracy in sea lanes will be a challenge. Illegal smuggling will increase. Enforcing or policing the movement of people and goods across borders and international space will become increasingly necessary.

Engaging the "Have-Nots": There is a lack of cultural understanding of "Have-Nots" by developed nations. Tools to engage "outsiders" that are increasingly polarized and combative.

"Have-Nots" producing WMD and Other Bad Things: Infrastructure will need to be protected. Failing developing countries with sophisticated technical/scientific communities will create pressure for proliferation of conventional and unconventional weapons. Serbia, Libya, or Venezuela may build a credible WMD program for trade concessions.

Maritime Awareness: Global Maritime Intelligence Integration (GMII) viewed as important to increase situational awareness over maritime traffic in the world where the "Have-Nots" are less cooperative or willing to contribute to the maritime picture.

Unity of the "Haves": Greater political integration in Europe will promote greater effectiveness of the DIME within Europe through sustaining/building Security, Cooperation, and engaging Russia.

Russia's Uncertain Future: The views regarding Russia's future were divided. It may deteriorate into a "Have-Not" – or not. The group was unable to reach consensus.

Seeds of Terrorism: Due to political reasons, non-economic terrorism will also be an issue in the region, because it affects some of the regional allies. Due to economic and sociological changes caused by the changing global economy, the root causes of terrorism have been exacerbated. Disparities in wealth create a breeding ground for state and non-state actors and terrorists to proliferate and become security problems. Populations without basic needs met are more likely to be recruited as terrorists. As a result, the needs of developing nations must be addressed.

There was considerable consternation when the group was presented with a Control-prioritized list of clusters. In the group's opinion, terrorism was one of the biggest issues confronting the region (due to the "super-empowered militant" in the "United We Stand"

scenario), and it had been prioritized out of further discussion. It took considerable moderator effort in order to return the group to their previous level of buy-in. Had that step of the process been described to them initially, it is likely that there would have been less push-back from the group.

Russia was seen as the “bear in the room”; the group felt that dealing with Russia (as a large and powerful European nation, and the only European nation that stood to lose a great deal in this future world) would be a primary concern for, *and unique to*, Europe. There was much discussion later on, outside the structured timeline of the event, regarding Russia’s role.

Maritime Tasks

The two tasks that received the most discussion by far were the construction of a maritime Common Operating Picture (COP) and Humanitarian Assistance/Disaster Relief (HA/DR) support. There was a surprising amount of talk regarding the necessity of a COP, and the amount of interoperability and level of detail required. The danger of information overload was pointed out by some participants; others argued that there is no such thing as too much information, and that a COP would act as a filter by easily identifying legitimate traffic. Further questions involved whether or not spending money on a COP would be worthwhile, if perhaps “diminishing marginal returns”⁴ would be an issue, and if spending that money would detract from other issues or actually save money on those other issues.

When discussing HA/DR support, much of the discussion focused on “zero-sum” idea of investment: how much money and resources could we afford to commit to HA/DR, and whether that would take away from warfighting capability. For example, does U.S.S. *Abraham Lincoln* deploy with fewer F-18s and more container/express (conex) boxes? Does the military buy conex boxes instead of Joint Strike Fighters (JSFs)? Discussion moved from there to investigating how much HA/DR support can be done with current equipment (and dual-use equipment) – after all, the U.S. Navy doesn't buy rice, but we do lift it. All participants generally felt that the Navy should play a role in HA/DR, even if it were only to show host nations that when big gray ships appear on the horizon, they aren’t necessarily there to “take things and break things.” They also generally agreed that too large a role in HA/DR would be counterproductive to traditional Navy roles, and as well counterproductive to HA/DR efforts in general (since there are other groups that also play a large role).

Led by the senior flag, the group revisited the issue clusters that had been prioritized out of the discussion. They took a brief look at most issues and determined their fit with the identified tasks, then focused approximately 40 minutes of discussion on Russia. The group eventually bought into the notion that certain issues were given low priority because the event operators wanted them to be looked at by other cells, but felt that this still didn’t fit with prioritizing Russia so low, because Russia applied uniquely to Europe. Thus, Russia was given heavy focus. The group decided that Russia’s nationalistic tendencies and potential “Have-Not” status could lead to Russia intentionally not

⁴ This was not actually the term used by the participants.

“playing nice” with the new order of cooperation. The group’s proposed course of action for Russia was that Russia would attempt to form a coalition of the “Have-Nots” in an effort to regain superpower status, using their abundance of non-petroleum natural resources. This would require a heavy focus on traditional naval tasks (such as strategic deterrence) and building credible maritime combat power, two tasks which would have been given low priority in the issue clusters that the group was directed to discuss. Interestingly, this discussion took place just one day prior to the beginning of the Russia-Georgia conflict and Russia’s subsequent attempts to influence policy in the former Soviet bloc, and to align themselves with nations such as Syria and Venezuela.

Build "Have-Not" Capability: While the cluster name focused on *capability*, many of the elements in the cluster focused on *capacity*, specifically with regard to SLOCs. Another element of the cluster was conducting coordination with host nations, regional partners, and Joint services to provide rapid humanitarian assistance during a disaster.

Increase Interoperability with Allies/Partners: This would be done by conducting exercises with international, state, and non-state actor (e.g., NGOs) partners to ensure interoperability, including HA/DR exercises with emerging partners.

HA/DR Initial Response: HA/DR response included many different areas, such as medical and infrastructure efforts to address danger to life in a disaster area, rapid and sustained non-combatant evacuation operations, search and rescue, facilitating/coordinating command and control to enable disaster relief operations, and conducting strategic communications in support of humanitarian assistance operations (including hospital ship deployments).

Enable Follow-On to HA/DR Effort: This was a catch-all for support activities conducted by non-maritime forces, including providing movement and protection for relief workers and their materials, and conducting and coordinating salvage operations.

Assert Sea Lane Access: Asserted by conducting Freedom of Navigation operations, and by developing capability to counter terrorism at sea.

Develop Maritime COP: By conducting Intelligence, Surveillance, and Reconnaissance, and applying COP to the piracy problem.

Information Awareness, Sharing and Assurance: By conducting Information Protection Operations to ensure information awareness measures are in place. Also, develop systems and training to ensure that Maritime Domain Awareness (MDA) information can be interpreted effectively. Sustain the COP with Allies in order to achieve maritime awareness in the littorals, including standards for the exchange of information.

Maritime Security Enforcement and Operations: Conduct enforcement of embargoes and sanctions as directed. Conduct robust deterrence activities in SLOC's. Conduct mine countermeasures (MCM) surveys of ports in order to support legitimate port use. Military support to law enforcement operations.

Strategic Deterrence: Continue deployment of ballistic missile submarines.

Combat Credible Maritime Power: Provide enhanced capability against small and high speed craft. Develop enhanced littoral capacity. Provide the ability to conduct Time Sensitive Strike.

Maritime Capabilities

As on the previous day, HA/DR and COP dominated the discussion. A full two hours was devoted to HA/DR discussion alone and probably would have gone on longer without moderator halting the discussion in order to ensure all topics were covered. For various reasons, there was some resistance to the mandate that HA/DR should necessarily be expanded. For example, some held that extra training was all that would be necessary, because otherwise we would be actively detracting from “traditional” military roles by removing ships from combat theaters and possibly removing combat capabilities as mentioned the previous day. It was also pointed out, and discussed extensively, that interoperability with NGOs is a major issue because in many cases NGOs don’t want to interoperate with the military (and vice versa when things like encrypted communications are concerned) and don’t have the technology to do so.

The COP discussion focused on much the same issues as the previous day; discussing just how much capability is needed and whether it weren’t technical but political issues that held this back. Again the moderator had to inject a change of topic because the COP discussion could have gone on much longer, especially in the realm of interoperability. Interoperability and potential political issues and the necessary agreements also influenced later discussions on capabilities such as asserting Freedom of Navigation (FON) and protecting ports and ships at sea. The general theme of the discussion seemed to be that many capabilities would be useless if not supported by a broad coalition of partners.

Improved COP: Expand the ability to create and sustain a robust world-wide COP and Common Intelligence Picture (CIP) in order to significantly improve situational awareness.

Countering High Speed Vessel Threat in Littorals: This is envisioned as including the ability to disable ships (military, commercial, private, small to large) using non-lethal weapons, determine the nature and extent of a potential littoral threats at greater ranges, in order to improve response rates and effectiveness, and detect and engage small, high speed vessels in congested waters for self-protection and defense of legitimate maritime interests.

Integrating Freedom of Navigation Operations: Ensure the ability to conduct coalition Freedom of Navigation operations.

Prompt Counter-Terror Strike: This is envisioned as including the ability to conduct combined seaborne counterterrorism operations within 12 hours, reach and board any ship at sea within 12 hours, and conventionally strike targets promptly (within an hour) from long ranges, plus conduct integrated Information Warfare operations.

Proactive and Comprehensive Approach to HA/DR: This is envisioned as including the ability to facilitate, support and integrate with partners and NGO's the planning and execution of HA/DR activities, plus provide an expanded capability to provide immediate full spectrum support for victims of a natural disaster and provide command and control between U.S. and its partner nations during initial HA/DR response. This includes HA/DR needs during pre-deployment planning, retain and employ hospital vessels to meet emergent large-scale HA/DR needs and rapidly employ personnel with the requisite

language and cultural skills. Lastly conduct combined medical and Civil-Military deployments providing deliberate and proactive HA efforts and provide support within 72 hours to victims within 150 nm of coast.

Maritime Forces and Infrastructure Protection: This is envisioned as including the ability to provide cooperative security of port facilities and integrated air and missile defense across a coalition, as well as an increased ability to protect port infrastructure from underwater, surface, and inshore threats.

Much of the discussion for this segment involved “capability gaps” – at what point do the maritime forces focus on the capabilities they don’t have at all, even if those capabilities are lower-priority than others? Discussion self-steered away from acquisition concerns vice operational concerns, as some felt that discussion was too focused on what to buy and buying for the sake of buying.

There was some objection to the fact that the majority of the capability clusters involved HA/DR and anti-terrorism/counter-terrorism issues rather than “traditional” naval capabilities. After some animated discussion, the explanation agreed upon was that the outcome was a direct result of the relatively benign scenario and Area of Responsibility – that in a world with international cooperation as the norm, and the major crisis points caused by the “super-empowered militant” and similarly aligned “Have-Not” states, that the more traditional capabilities of the maritime force would give some way to HA/DR and anti-terrorism/counter- terrorism capabilities. In other words – these were the capabilities that required improvement going forward toward this future – not an exhaustive list of required capabilities.

Latin America Cell

The Latin America cell consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, academia, and representatives from Argentina, Brazil, Chile, Columbia, and Peru.⁵

The Latin America cell was presented with the "Made in East Asia" Alternative Future. (Extremism: Disempowered/ Passive (i.e. low); Resource Rivalry: Collaborative (i.e. low))

Regional Perspectives

Political: Nations in the region will continue to act independently. There is a lack of drivers toward regional integration – while social relations are good amongst the countries, the lack of politically stable countries would make it hard to see any kind of cohesive integration. Countries will continue to favor multilateral vs. bilateral approaches to international problems.

⁵ One recurring topic of discussion throughout the week was the question of what should be considered as "Latin America," for while the intent was to have the cell consider their region to consist of Central America, South America and the Caribbean, there were no foreign representatives from Central America, Mexico, or the Caribbean in this cell (as the Mexican player was assigned to the North America Cell).

A common currency is unlikely, although there were some dissenting opinions on this topic concerning which currency (Euro, dollar, or Chinese) currency might be the most important in 2025. Many felt that most currencies would still be linked to the dollar, and that with the improvements in technology, a common currency isn't necessary.

Migration will affect U.S.-Latin America relations. The U.S. has a large Latin American population already in the U.S., which was expected to continue. It was stated that most countries' political systems and civil societies will benefit from this. This seems to contradict a discussion later in the day that suggests in 2025 the U.S. will continue to lack a holistic policy with respect to Latin America even with such a connection.

Asian migration to Latin America was also discussed. The discussion centered on the fact that many illegal immigrants from Asia use Latin America as an intermediate stop before transiting to the U.S. This routing also lends itself to the illegal trafficking of drugs/persons. This was viewed with concern. In addition, there was concern regarding legal immigration from Asia, and the potential for changing political influence.

The promise of democracy was viewed as still viable, but threatened by poverty and a skewed distribution of income. It was stated that when the U.S. companies come in, and the locals don't benefit, they view the U.S. poorly. "We may see a region where the countries aren't necessarily democracies. They may move towards a Chinese style of government. Bottom line, it doesn't matter what kind of government there is, food for the people is the most important thing." Again what seems to be a contradiction to this idea, it was stated that our militaries will see improved partnerships and that the U.S. should not feel threatened even with a region that may be closer to China.

Finally, there must be consultation with partner states in Policy and Planning (e.g. Fourth Fleet).⁶

Military: The cell viewed interstate conflict in Latin America as being unlikely – the consensus seemed to be that the countries in the region had many more issues with intrastate conflict vice interstate. Military spending was assumed to go down, and the military will be called upon to focus on nontraditional roles and activities, such as HA/DR. One U.S. participant commented that reduced military capacities in 2025 would likely lead to less mil-to-mil contacts and operations, which would decrease a main, positive area for U.S.-Latin American relations and influence.

Cultural education programs for the sea service personnel were viewed as important, with the subject being discussed many times throughout the week, by both foreign and U.S. participants. Latin American officers made the point that Latin American military personnel know English fairly well, but they doubt that many U.S. Navy officers know much Spanish. Sending more U.S. officers to attend Latin America service schools would help solve this problem, and demonstrate that the U.S. respects their Latin American partners.

Economic: Growing Chinese demand and activities fuel growth of Latin American economies. There was considerable discussion by Latin American officers on the

⁶ The Fourth Fleet stand-up example was broached several times by regional representatives as a perfect illustration of U.S. action in/towards a region without prior consultation

attractiveness of U.S./democratic vs. Chinese/authoritarian polities (e.g., Singapore/benevolent dictatorships example cited). Chinese economic growth is attractive to Latin American countries. Comments included such as their being less concerned with political structure as with economic effectiveness, i.e. jobs/food on tables.

It was agreed that the widening of the Panama Canal will have diverse affects on shipping and commerce, but the cell was unable to reach consensus on whether this would benefit or hurt the region.

New technologies that allow seabed exploration and production of oil at \$60 U.S.D result in shift of regional/international energy balance. The Alternative Future projected drilling to depths of 30 thousand feet, which was considered improbable by participants, but acknowledged could be a game-changer.

Social: The increase in Latin American population in the U.S. raises importance of U.S.-Latin America relations. This can be an effective tool for shaping public opinion

Infrastructure: Increased sea lane and port congestion increases importance of The United Nations Convention on the Law of the Sea (UNCLOS) ratification by the U.S.

Information: Wireless telephone technology is the primary delivery system for internet and other information in Latin America.

Regional Issues

As with the other cells, there was some pushback regarding the cluster re-prioritizations done by the Control cell.

Inadequate Coordination of U.S. Policy: The U.S. will still lack a holistic, cohesive policy toward Latin America. Latin American population integration and recruitment into U.S. government will have implications for the U.S./ Latin American relationship.

Reduced U.S. influence due to rise of China: The growth in Chinese economic impact in the region is reducing U.S. military influence. U.S. regional influence is diminished as trade patterns diversify. Latin America receives many Asian immigrants, which has the effect of refocusing Latin America towards Asia. There are issues with interoperability of Command and Control systems. Latin American governments are popular and don't want to be influenced by the U.S.

Increased severity of weather resulting from global warming increases death and destruction: Increased weather severity and changing weather patterns are expected, with increased destruction.

Inability of governments to deal with economic and social problems could lead to weaker democratic governments: Weaker states will not be able to exercise sovereignty. There will be political change due to social unrest. Democracy has not given the answer the people expected – there is skewed income distribution. Poverty will continue to provide undesirable effects.

Rapid evolution of maritime commerce raises new issues for cooperation: Widening of Panama Canal will change shipping and transport. Sea lines of communication are now more crowded at sea and in port areas; increased crowding at embarkation/debarkation

will foster piracy and collisions. But there will be increased cooperation over the seabed resources.

Illicit trafficking will hamper progress: Address illicit trafficking in drugs and humans.

Reduced U.S. influence related to reduced funding for the military: Reduced military capability will lead to reduced mil-to-mil cooperation due to increase in non-traditional challenges; limited DoD funds will place greater strain on traditional vs. non-traditional military capabilities and resources.

Maritime Tasks

Increase broad-based presence-partnership activities: Conduct frequent collaborative strategic events that foster international maritime partnerships. Conduct military contribution to cooperative security in order to build partner nation capacities and capabilities. Appear jointly with civilian agencies in order to better connect security and economic development. Increase cultural, education, & community involvement during pre-port visits. Increase U.S. presence in social programs during visits of navy ships to Latin American countries.

Increase maritime cooperation operations: Increase interagency maritime exchange programs. Leverage non-Latin American allies interest in Latin America in order to mitigate projected reduced U.S. military funding. Conduct more multinational exercises, at sea and ashore, in order to increase interoperability and maritime awareness. Conduct a military support exercise (intelligence, funding, and training) with Latin American governments in order to have a stabilized region. Conduct maritime security exercises and training to increase military cooperation, trust, and therefore U.S. influence. Conduct more irregular warfare activities. Conduct civil/military exercises with Latin American nations. Conduct persistent forward presence. Increase security cooperation operations. Conduct joint task force-type operations with alternating national commands and multinational staff. Conduct TSC to counter East-Asian influence. U.S. policy is inadequately coordinated.

Stress education of sea service personnel to improve their ability to work in the region: Conduct cultural immersion training in order to increase/ familiarize personnel with people and cultures in the AOR – "know your neighbor". Conduct more economic and social education of naval officers.

Conduct cooperative research and planning for maritime development: Increase institutional links with Latin American civil agencies for maritime issues. Research SEA opportunities for development.

Change the force structure to meet the needs: Theatre security cooperation force structure. Recognize force to enable increased security cooperation.

Improve cooperation efforts to improve maritime domain awareness: Increase feeds shared information MDA to produce end state shared COP. Complete and standardize info-sharing systems in all American countries to firmly establish MDA. Rapid Evolution of Maritime Commerce for Cooperation.

Prepare for and conduct HA/DR operations with civilian agencies, NGO's, and partners: Conduct increased HA/DR in order to mitigate human suffering. Seek out local NGO

partners for Community Relations (COMREL) Projects in order to increase their effectiveness.

Traditional Naval missions and tasks and supporting concepts are enduring, however reduced access and a less permissive environment require more reliance upon forward presence and coalitions. Forward Presence is the foundation for all maritime tasks; reassure allies and deter/respond/prevail against other blocs. Additionally, this includes SLOC and resource protection, project power to gain and maintain access, seabased ISR to replace terrestrial ISR, and respond to challenges with high fuel costs, great distances, and absence of land bases.

Maritime Capabilities

The cell identified the following five maritime capability clusters:

- *Ability to conduct full-spectrum information sharing and operational collaboration*
- *Conduct tailored, flexible, non-traditional maritime operations*
- *Ability to understand and interact with partner forces and citizens*
- *Ability to rapidly form combined forces for sustained operations*
- *Ability to coordinate strategic messages among U.S. agencies and partners to clarify U.S. objectives and intentions*

In addition, the cell provided the following insights during their capability clustering activity:

- *Consider Non-DoD means/resources, such as other military services, agencies, NGOs and international partners.*
- *Cell discussions reinforced the importance of info-sharing, including COP and MDA, as well as the need for an information network that partners can access.*
- *Strategic messaging must be done in concert with partners, a shared responsibility with partners often in the lead.*
- *Need to find a balance between non-traditional missions and major combat operations, including the diminishment of warrior ethos and working to achieve increased efficiencies through increased collaboration with other agencies and international partners.*
- *Inclusive C2 architecture enables efficient and effective collaboration with partners.*
- *Cultural and language education supports other capabilities and accomplishment of maritime tasks.*
- *Objectives and messages need to be aligned in the U.S. government*

Middle East/Central Asia Cell

The Middle East cell consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, academia, and a representative from Pakistan.

The Middle East cell was presented with the "United We Stand" Alternative Future. (Extremism: Super empowered Militant (i.e. high); Resource Rivalry: Collaborative (i.e. low))

Regional Perspectives

The overall theme is that the world is less dependent on oil thus causing the region to have less influence worldwide and traditional ways of living are eroding away.

Political: There will be less stability in Dubai because of the link to globalization. Elites will lose power. Central Asia will shift back towards Russia in terms of support

Military: There will be military takeovers in most of those countries. The military will be the only remaining structure in many of these countries. The Government and the military are so closely aligned it is difficult to imagine them not remaining in control of most of these countries.

Economic: With less dependency on oil, these Mideast countries will see a decrease in their economies that will decrease power of the elites. Some optimistically thought that these Mideast countries may diversify and become less dependent on traditional energy resources. All agreed that we will see an effort by governments/regimes to balance in order to maintain power and remain participants in the global economy. Dubai will likely become the model economic power because it shifted from a dependency on oil early. There may be a loss or shifting of the population due to the loss of service economy

Social: Disenchantment among people, more civil unrest and instability, with a decline in lifestyle (greater disparity between the haves and have not's) and resentment against the West. Israel will also become a scapegoat. Increase rise in anti-government, vice anti-Western sentiment; however there was a counterpoint made that in the Middle East media the governments will seek to push anti-westernism sentiment to decrease the anti-government animosity. Increased social unrest & political instability escalates extremist activity.

Regional Issues

Economic partnerships and influence of outside powers: Dubai will be targeted as a focus on finance and globalization. Governments will not be able to control Internet information, leading to a loss of traditional narrative. Governments will turn to other countries like the U.S., China and Japan to provide stability. When the U.S. influence diminishes, these countries will prosper.

Reduced US presence due to declining oil importance allows Middle Eastern countries to open to other partnerships: Other powers (China, India, etc.) will exact greater influence in the Middle East because they will be trading in more Middle Eastern countries.

Egypt is critical to Middle East political and world economic stability: An unstable Egypt will lead to global transportation problems because the Suez Canal is a key chokepoint.

Demographics migration and economic change: opportunities and challenges: Population will migrate toward economic opportunities away from their home region and create government challenges.

Domestic political instability creates regional and international security implications: There will be a rise in Middle Eastern anti-government sentiment as populations see themselves in the loser vice winner column. We will see an effort to balance Middle East countries to maintain power and remain a player in the global economy. It doesn't really matter what's driving the economy (oil or something else), what really matters is what source will allow these governments to maintain the status quo in their countries.

Security engagement after oil still necessary: If non-state actors take greater footholds, we probably will have less access to these areas. (There was some discussion about whether the U.S. would really care about the Middle East and Central Asia without the oil.) If we pull out of the Middle East, al-Qaeda can do whatever it wants. For example, Africa has already gone by the wayside due to the lack of oil resources. If our economy is in trouble and we can't support this level of effort, would we still be over there? On the other hand, countries that we have been helping may be willing to further help us in those areas. Moreover, if a country like Iran were to fall, neighboring countries may want us to keep a presence in the region. Terrorist CBR attacks will originate in the Middle East and require Western action. The challenge will be to keep Middle Eastern countries willing to tolerate an anti-terrorist military footprint.

Regional Maritime Security & Challenges Posed by Piracy and Terrorism: (no amplifying comments were generated by the cell).

Re-evaluate Alliances & Enhance Image "Opportunities after Oil": Because nations have lesser interests, the oil producing states will yield a reordering of national interests with more dominant countries coming out on top

Social Unrest Political Instability: Declining oil revenues may lead to anti-U.S. coalition sentiment and escalation of extremist sentiment. Growth in illegal and black market economies finance terrorist activity and will require legal & military policing as a governmental response. There will be a rise in anti-western & anti-Israel sentiment. Whoever aligns with U.S. will feel the wrath of the terrorists in the Middle East.

During the regional clustering and regional issue discussions, the moderator reminded the group that their alternative future included a chemical weapon attack in New York in 2023 and that the U.S. will likely still have Global War On Terrorism (GWOT) interests in the Middle East/Central Asia. He then proceeded to ask the group whether they felt that Iran would have nuclear weapons in 2025. The cell decided to table to issue of Iranian nuclear capability and focus on "threats to ships vice Iran's nuclear weapons."

Maritime Tasks

Conduct Maritime Counterterrorism Operations: Specific activities include operations against pirates/terrorists, deterrence through show of force, freedom of navigation

operations, persistent ISR, joint or unilateral operations against terrorist groups, counter-insurgency, locate and target specific terrorist threats, conduct MIO to counter terrorism & WMD proliferation, and develop persistent surveillance. Such operations could utilize both maritime and non-maritime assets for their accomplishment.

Forward Presence to Assure Maritime Security: Agreements to facilitate access and (joint) operations, build trust to facilitate long-term cooperation, port-calls, et cetera. Naval presence to protect trade routes, education and training, maintain SLOCs through coalitions when possible, enable partners to do work on their own (global maritime partnership), contain regional threats, and create a favorable environment. Also needed is maintaining SLOCs through forward presence, leveraging regional maritime forces to secure SLOCs, and maintaining presence for assistance with common goals.

Conduct Cooperative Security Activities: Activities include information sharing, coalition building, and engagement, facilitating assistance, info sharing, multilateral partnerships – if we do not, we may alienate our partners. Also pertinent are to conduct strategic communications, create training and security assistance, and stay engaged to improve security environment. The point was made that the cost of doing nothing would be significant in that *“If you do not have specific requirements it is difficult to plan and execute (i.e., if NAVY is not there, then U.S. loses relevance)”*.

Build & Sustain Regional Relationships & Partnerships: We have many strategies; hopefully, we have an interagency flavor within them. These include ... engage regional navies and coast guards to increase capacities, mobile training teams, etc ... facilitate operation of regional navies ... irregular warfare, training & assistance for regional partners, create DoS/U.S.G/ Interagency/ U.S. Navy cooperative C2 organization to focus maritime support to countries, and HA/DR. We need to develop cooperative relationships, negotiate tasks with regional partners, and invest in regional partnerships. In this cluster; the point was made that *“The Middle East is all about building relationships. It has less to do with plans and vision than it does with sustained, continuing relationships between people. As long as the U.S. has a “rotate-in,” “rotate-out” philosophy, it will not accomplish its goals. For example, think about buying a rug in the M/E. It is a several hour process involving getting to know the merchant, drinking tea with them, etc.”* This point reinforces an earlier discussion during the clustering phase; *“We do not have long term regional personnel who are assigned to a region to establish long term relations. We have short term (18 Months CDRs) that do not have / spend enough time to be an expert in the region and foster long-term relationships.”*

Conduct Defense of Critical Infrastructure [Computer Network Defense] No amplifying comments were made.

Overhaul Technology Transfer Rules: Our transfer rules are too outdated since they were written in the 50's to prevent nuke tech but this doesn't apply today...we transfer BMD tech to Japan a former enemy but can't transfer some torpedo technology to Australia who has been our ally since 1812!! It's bizarre.

Empower and Assist Partners: Enabling them by providing appropriate training, equipment and infrastructure and creating efficient equipment and technology transfer processes

Maritime Capabilities

This was probably the most difficult of all the previous clustering activities the Middle East cell conducted. There were over 200 capabilities captured as the capabilities were broken down by using basic capability areas, i.e. *Command and Control, Maneuver, Fires, Intelligence, Logistics, Force Protection, and Partnership*. This was a long and tedious exercise because of the cell's approach to the task; however, they derived two sets of clusters which are categorized below as Mega Capabilities and Maritime Capabilities.⁷

Mega Capabilities:

- *Promote Interagency Cooperation to Train For, Identify & Defeat Threats*
- *Force Protection & Maintain Log Infrastructure*
- *Strengthen Regional Partnerships and Identify Coalition Shortfalls*
- *Robust C2 Spanning ME AOR 24/7*
- *Aggregate & Maneuver Appropriate Forces to Areas Where They Will Have Greatest Effect*
- *Find/Fix Terrorist Targets*
- *Incorporate Regional Partners Across the Range of Military Operations (ROMO)*
- *Training and Employment of Multi-National Strike Capability*

Maritime Capabilities:

- *Strategic Communications*
- *Tactical/Operational C2*
- *Power Projection*
- *Logistics Support*
- *Protection of Critical Infrastructure*
- *Develop, Empower & Implement Regional Leadership*
- *Partnerships Through Security Cooperation*

In addition, the cell provided the following insights during their capability clustering and analysis activities:

⁷ Capturing player discussions during this period was extremely difficult due to extensive data entry into Excel.

Diplomatic: Long term relations are important to shaping and understanding the minds of local leaders. Cultural awareness and sensitivities as well as perceptions must be part of efforts to interact with and positively influence relations with leadership in each region.

Innovation: Given that near term hardware is relatively static, due to normal procurement cycles, alternative and innovative ways of employing resources should be encouraged. Adapting to new geography or requirements must be embraced at both tactical and operational levels. Balance our direction of innovation with our allies' ability to change and either bring them along or fill in for what they cannot do.

Training: Operational level leaders need operational level training. Raise the importance and acceptance of time at schools and training and that it not hurt career progression.

North America Cell

The North America cell consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, academia, and representatives from Canada and Mexico.

The North America cell was presented with the "Global Chaos" Alternative Future. (Extremism: Super empowered Militant (i.e. high); Resource Rivalry: Hyper competitive (i.e. high))

This was easily the least favorable of the Alternative Futures, with high degrees of both extremism/radical empowerment and resource competition. As a result, the cell was observed to exhibit somewhat of a "bunker mentality," focusing on tactical level threats to a greater degree than the other cells.

There was some concern expressed regarding the internal consistency of the scenario presented – one foreign representative in particular felt that the single most important security issue in this scenario would be Global Warming and all other concerns would be inconsequential.

Regional Perspectives

Starting off with political characteristics, some participants thought there may be a rise in fascism and a move towards a strong police state. The logic behind this was that people would be willing to give up individual rights because of the great fear of being attacked, especially considering the threat of a WMD attack. However there was another group of participants that had the exact opposite view — that the federal, centralized structure would be weakened by stronger local, tribal groups. The tribal structure would emerge as people stayed close to home due to fear, but also due to the high cost of travel.

Beyond U.S. borders, a group of participants thought there would be a stronger regional perspective. U.S., Canada and Mexico would forge strong ties for national security. Other participants thought the exact opposite. With the limited resources the three countries would actually compete more and we would be less aligned. There would be tension with Canada, because they own so many more resources (e.g., petroleum in Alberta). One participant thought that countries may forge national partnerships not based on regionalization but based on access to resources, e.g. North America would align with Australia for access to minerals.

Another negative consequence of this high resource rivalry would also give rise to increasing black market activity.

A number of participants recognized that there was a high probability that the Maritime Strategy from 2007/2008 was thrown out. It just didn't work in this scenario.

Furthermore, the U.S. was isolated by the rest of the world, because the maritime power of the U.S. threatened other country's resources and supply chains. So rather than building "A Cooperative Strategy for 21st Century Sea Power," the U.S. would have had no choice but to build a stronger isolated Maritime Force.

Political: Democracy at home stressed – other ideologies emerging elsewhere. Draconian domestic measures and a potential for federal/state/local dissonance surfaced. In this scenario, the U.S. is “alone” fighting war on terror and aiming to survive.

Military: Protectionism/isolationism develops on a global scale. With a tired military and competing demands for forces (home and away), but no military peer competitor, irregular warfare dominates.

Economic: There is a central role for oil/fuel alternatives and safe water sources. There is a rise of Eurasian economic peer competitor, and a potential exists for “New Deal”-like governance.

Social: The world is no longer interconnected – social fragmentation feeds cycle of chaos. Large community gatherings are difficult in chaotic security/pandemic environment resulting in smaller/safer social groups. National interests coalesce around homeland centric priorities, not “global village.”

Infrastructure: There may be a significant reduction in global air travel due to a pandemic. Physical infrastructure erodes without materials for renewal or repair. There could be a resurgence of regional/local supply chains, and a potential emergence of new “Black Markets.”

Information: Information and media networks will be eroded with loss of reliable internet driving alternative communications. Internal security threats drive requirements for increased domestic surveillance and intelligence.

Regional Issues

The North America cell had various and diverse thoughts and ideas with this portion of the scenario. The dividing lines seemed to be according to grouping: Navy with security of the sea lanes and how to maintain this advantage; Government workers aligned with current U.S. government with being more authoritative immigration issues; Civilian personnel concerned with trade/logistics, transportation issues – Arctic; Canadian and Mexican personnel contributing to the Arctic discussion, and sharing of resources. This scenario will contribute toward an isolated continent with no need to reach out to other countries outside of North America.

Integrated U.S.G approach to Homeland Security (Full Spectrum Home Security): Due to Terrorist attacks to U.S. cities, we will increase intelligence activity to identify and stop their activities. Increased need for maritime force allocation will be an issue due to increased internal threat. Due to increased maritime security, government/private sector partnerships may require better-integrated security. The continued Chemical, Biological, Radiological/Nuclear, and Explosive (CBRNE) threat requires robust detection capability. Due to past WMD attacks, economic hardship and pandemic DoD resource availability will be an issue because of funding and DoD priority shifts.

Resource Rivalry Drives International Rule of Law to Collapse: Due to the waning of international cooperation and international body’s principle and due to resource rivalry and collapse of global trade, increasing illicit activity and black markets will challenge security and economic stability in North America. State conflict becomes increasingly likely with border/ EEZ encroachment. Nations may become ready to “kill for cod.”

Also, due to resource rivalry, national border encroachment and therefore warfare becomes more likely.

Competing Demands to Support Home and Away Games: Due to forces isolationism, lack of ability to engage will hinder forward progress/resolution of concurrent chaos. Forces must be economized to maintain steady state engagement to prevent import of terrorism from overseas. Due to stress on the force structure and information compartmentalization, training will be an issue due to resource constraints. More robust logistic forces will be required to sustain the use of forces. Competing interests will emerge for force structure and positioning within the North American AOR. Defense and security demands increasingly outstrip supply.

Managing Demographics and Economy of Chaos: Due to increasing offensive and defensive military requirements the ability to automate will become important. Due to increased regionalization, more jobs will be created in North America than were previously sent overseas. Due to inequities between nations, immigration and emigration issues need to be addressed, as well as a Carbon Deficit.

Civil, Military, and Private sectors: Changing roles, responsibilities, and expectations: At the time when connectivity among military, interagency, and industry is needed most; the internet collapses from direct attack. Due to chaotic issues, there is a lack of confidence in government and civil-military relationships. Due to increased use of the maritime highway and an increased threat, the private sector will assume a more active maritime security role due to constrained resources.

Maritime Tasks

Maritime Defense Operations: The Operations will conduct ASW to prevent attack, surveillance, and illicit activity, conduct integrated air and missile defense to protect North America, conduct strategic deterrence operations in order to deter hostile nation state attacks on the homeland, and conduct Mine Countermeasures to maintain SLOC and Port Security.

Maritime Enforcement Operations: The Operations will conduct Maritime Interdiction Operations in the Approaches to North America, conduct Maritime Law Enforcement operations in order to prevent illicit transport of cargo and people, conduct patrol and surveillance operations to protect natural resources and associated infrastructure in the EEZ and Outer Continental Shelf (OCS), conduct quarantine enforcement to limit spread of disease in North America, and conduct counterterrorism to prevent, deter, preempt and respond to terrorism threatening our national borders.

Critical Infrastructure Protection: In order to protect DoD and other critical infrastructure from terrorist attacks, the following will be need: conduct force protection in order to protect U.S. forces from host of threats including CBRNE, conduct computer network defense in order to ensure the intensity of the internet, communication system, and financial systems, maintain mission assurance in order to have military strategic mobility, and protect critical infrastructure in maritime domain in order to preserve oil and resources.

Consequence Management (CM)/Humanitarian Assistance / Disaster Relief (HA/DR): Forces should be prepared to conduct HA/DR in the AOR and conduct construction of forward operating bases in areas of consequence management.

Maritime Domain Awareness: Seen as an enabler, conduct MDA of all source information in order to provide indications and threat to the homeland.

Regional Security Cooperation: Seen as an enabler, conduct Joint training and engagement with foreign militaries in order to prevent hostilities, as well as conduct Minesweeping Operations (MSO) with maritime partners (Nations, interagency, NGO) in order to protect Homeland / North American national interests.

Maritime Capabilities

The overarching theme seems to be “trust.” Trust between countries and how to achieve results positively with bilateral talks and Memoranda of Understanding (MOUs) are paramount in this future. Global warming was a recurring topic.

Air Missile Defense: They will need to conduct persistent and deployable missile defense to counter asymmetric terrorist air threats at a safe distance from defensible sites within the U.S. is needed. Defenses must be capable of conducting short and medium range Ballistic Missile Defense (BMD) of key seaports as required. The capability is needed to conduct Integrated Air and Missile Defense (IAMD) maritime domain in order to protect naval forces conducting maritime enforcement and defense operations.

Anti-submarine warfare: they need to detect, interdict, board and defeat objectives of interest, including submarines in the maritime environment in America's EEZ and conduct Maritime Law Enforcement Operations in order to permit illicit transport of cargo and people.

CBRNE Response: They need the ability to respond to catastrophic attacks within the homeland in a CBRNE environment to conduct assessment and evaluation force protection in order to protect U.S. forces from host of threats including CBRNE. When directed, they need to detect, diffuse, mitigate, isolate and dispose of threats with minimum impact and loss of life and provide CM/HA/DR response capabilities (assessment, remediation) in a CBRN environment.

Information Sharing: They need to fuse and disseminate all source intelligence near real-time and share a common operational picture of the Maritime Domain to all stakeholders including civilian, 24/7 to all decision makers. They should allow robust classified and unclassified information between the U.S., Canada, and Mexico.

Interdiction/Interception: Deliver non-lethal force to protect maritime critical infrastructure when required. Lethally or non-lethally stop non-compliant vessels in the approaches to North America. Apprehend, detain, quarantine, and transport persons of interest from maritime vessels within EEZ as necessary. Provide force protection for boarding parties when conducting boarding's 24/7. Conduct all types (opposed, unopposed) of boarding's at a safe distance from North America 24/7. Persistently interdict when necessary, defeat maritime threats in the approaches to North America and U.S. territorial seas. Lethally or non-lethally stop military vessels in the approaches to North America.

Interoperability with HA/DR/CM Partners: They should coordinate the efforts of NGOs and integrate NGOs into the HA/DR planning process. Information operations apply in disaster relief area, as well as to ensure interoperability with public and private sectors. They need to forecast, collect, process and disseminate information on HA/DR events to all appropriate entities (civil authorities, NGOs).

Military Deception: Information operations are conducted to include operational deception to thwart a terrorist attack and enhance homeland security. They will perform on-scene biological detection all the time prior to arrival and after arrival within North America and expand the ability to determine and protect vital areas against terrorist attacks in maritime environment

Mine Warfare: They should conduct defensive mining to critical approaches and high value areas and conduct MCM Ops in a desired port environment when needed.

Relief Logistics: They should provide sealift, disaster relief, supplies, and personnel within 72 hours of a natural disaster, provide and coordinate emergency medical services to victims of HADR events at sea or in coastal locations, and relocate 10,000-plus victims from disaster sites to safe areas for treatment.

Surveillance: This includes ensuring the ability to monitor lawful and unlawful economic activity in the EEZ 24/7 and developing the ability to identify prior to entry into North America, persons affected with certain diseases 24/7. Expanding the ability to conduct sustained maritime enforcement activities within the EEZ (24/7) within the approaches of North America is important. They should collaborate and coordinate with maritime partner nations to enhance security and minimize economic impact. Detection of CBNRE specific ISR offshore at the furthest possible distance from North America all the time with the ability to conduct 24/7 ISR ashore and afloat to detect, identify, and track land and maritime targets is critical. There should be the capability to search, classify, track, defeat all types of submarines and submersibles in open ocean and shallow water within the approaches of North America in all oceanographic environments.

Global Cell

The Global Cell was unique in GLOBAL 08. While it consisted of a broad spectrum of experience from the DoD, U.S. Government, NGOs, and academia like the other cells, these participants were from organizations that had a broader set of international responsibilities than the regional cells. In addition, the Global cell did not include foreign representatives, whose participation was considered more valuable in the regional cells. (This did not prevent it from being the largest cell by far, which made some of the basic clustering techniques difficult to execute.) The intent was for the Global cell to have a broader perspective on the issues under discussion, but it was noted that the Global Cell had the preponderance of “Party Line Players,” who exhibited a tendency to “steal bandwidth” from the “alternative thinkers” in the group.

The Global Cell was presented with the Tri-Polar Alternative Future. (Extremism: Disempowered/ Passive (i.e. low); Resource Rivalry: Hyper competitive (i.e. high))

There was significant pushback by most of the cell on how the world got to this point and several hours were spent fighting the scenario and pointing out discontinuities or conflicts between elements of the scenario. The group expected the moderator to have a greater level of detail than that available in the scenario material. Eventually, the cell staff (moderator and facilitator) was able to make the group realize that the event design called for them to look at the baseline scenario and develop the additional level of detail. Once the cell accepted the event construct, they were able to move forward. While the cell had been fighting the scenario to some degree, the early discussions did provide a good footing for developing the regional perspectives.

Regional Perspectives

The group summarized the important aspects of the scenario as follows: Tri-polar (Europe/East Asia/ U.S. & others); extremism passive; resource rivalry; increased fuel costs; increased spending on Defense. They saw these aspects having the following macro effects: collaborating with others to form military alliances to secure oil and gas; less volume of trade; remaining trade greater importance; premium on access to resources in ungoverned regions; SLOC disruption becomes the focus; and a higher demand for Naval Forces (survivable against long range weapons).

Political: Members of blocs or cooperative groups are distributed globally vice being regionally based. (During the morning session, there were several periods where participants discussed the distribution of nations in the different blocs described in the scenario.) This can be described as a “balance of power”, “correlation of forces” or “Realpolitik” world. The blocs will set the foundations for bi-lateral agreements. International cooperation will not break down completely, but agreements will not cross over to competing blocs. Non-bloc nations are likely to exploit the seams between blocs. Growing instability will lead to “soft authoritarianism.” There is likely to be a breakdown of international law, because with weak institutions like the UN, international legal frameworks (including UNCLOS) will be ineffective, and no organization will be in a position to enforce legal agreements between blocs.

Military: Loss of maritime access abroad occurs. Conflict between blocs is not existential in nature. Struggle over the global choke points becomes critical. All three blocs may have sea-disruption capability, but none of the blocs have a sea control capability. Maritime security is likely to be “outsourced.”

Economic: In this future situation, trade will be down overall, but the remaining trade will be critical. The competition for resources between blocs may not translate to competition or conflict over the trade of finished goods. (The moderator cited historic examples where there was significant friction between blocs where trade continued. The cell came to the consensus that trade in finished goods would continue albeit at a lower volume due to generally weak economic activity and high transportation costs.) Competition for resources occurs while trade in finished goods continues.

Because of the cost of fuel, there will be a drastic drop in global trade, with goods being made closer to the point of consumption. Consumerism is driven down.

This reduces the flow through SLOCs. Trade is more important, though there is less of it. There will be a revival of national merchant fleets; the U.S. will have to develop its ship building industry.

Social: Mass humanitarian crises and social unrest occur. U.S. cities become more centralized (and society as a whole becomes more city-based) due to high fuel costs. We no longer have an industrial economy. Day-to-day life may be very different.

Regional Issues

Loss of foreign bases reduces access to critical areas and U.S. ability to influence through military means is greatly reduced: Loss of physical presence in an area was seen as a barrier to projecting influence as well as all elements of DIME power. In a world that is disconnected and unreachable for a number of reasons, it is difficult to deter conflict.

This cluster is about obstacles to presence, and revolves around the logistics problems created by the loss of bases as well as the loss of influence. In this future, there is a greater requirement for power projection, but the military will suffer from the collapse of the global U.S. logistics infrastructure.

In this future the maritime strategy is turned on its head. Because there is no 1000 ship navy out there, it will be expensive to create ‘lily pads’ all over the world. The ability to project your effect at the time and place of your choosing is reduced.

U.S. will have to deter against disruption as well as destruction. (Disruption is the economic equivalent of destruction.): Resource competition may lead blocs to disrupt the flow of resources to members of other blocs. (The cell coined the term “mutual assured disruption.”) All three blocs have a capability for disruption, but not sea control. Non-bloc proxies could be employed to disrupt trade. This disruption could be physical or cyber in nature.

There is an increased long range threat to U.S. and coalition assets that places our freedom of action at risk: Enemy long range strike increases risk to surface assets making it potentially costly to project power; the proliferation of long-range strike capabilities in the maritime environment may preclude the introduction of high value assets into contested areas. The U.S. will need missile defenses to protect not just assets but

populations and infrastructure. Competition between blocs will occur at extremes of the competition spectrum – ultra-high-tech threats on one end to dealing with warlords on the other end.

Humanitarian and economic crises will affect U.S. access to resources: Due to increased fuel cost and decreased resources, human suffering will be an issue. Resource scarcity, lack of basic human needs, social unrest, and weak governments in resource rich areas may lead to a downward spiral in regional stability. Our aversion to cooperating with “bad actor” countries may further reduce inclusion in the U.S. bloc and our access to resources.

Resource competition (food, water, fuel, minerals) leads to bloc formation and competition over resources in ungoverned and under-governed spaces: There was significant discussion over this causal chain. This cluster outlines two types of areas: non-aligned and ungoverned. There may be competition to extend influence into both types of areas. Both types of areas may increase the need for forward presence to ensure access to resources.

Increased ungoverned and poorly governed spaces in resource rich areas are likely venues for conflict: The center of competition among the blocs will be the non-aligned areas which have strategic resources. These under-governed areas could shift the balance of power.

Area denial and anti-access strategies have extended into space and cyber space; infrastructure will be less stable and reliable: Linked by the idea of “threats to Global Commons,” this cluster extends area-denial and anti-access concepts to space and cyber areas. Combining these threats was not a unanimous decision; there was a minority position to keep threats to space and cyberspace two separate issues.

Realigned international partnerships and resulting loss of bases challenge traditional ISR capabilities in some key regions: Both pervasive ISR or battlespace awareness, and operational net assessment of enemy intentions, capability and capacity become more difficult.

Blocs will use resources (food, water, energy, minerals) as weapons or elements of power: While blocs may use resources as instruments of power, this may require nationalizing corporations, not unlike what is happening in today in Venezuela, Russia, Burma, et cetera. The resource competition was not just about energy, but resource scarcity in general.

Blocs will be less inclined to respect traditional international law: In this hyper-competitive environment there is great pressure on the boundaries around the blocs and the EEZs. Resources from the oceans may drive national or bloc boundaries out into the oceans. Technology that allows very deep water drilling or mining is an example of this. In the Tri-Polar world, there may be no one to enforce or adjudicate legal issues within and between blocs.

Maritime Tasks

The discussion on Maritime Tasks led to significant discussions regarding presence operations, global fleet stations, and sea-basing in response to the Regional Issue cluster

about the loss of global basing. The Global cell was fortunate to have many program advocates on hand.

Conduct forward presence to reassure allies, assuage the non-aligned, entice new allies, and deter/respond/prevail against other blocs: Issues included activities to develop tailored diplomacy and build partnerships and partner capacity, including building partner ability to conduct HA partnerships in order to reduce regional instability.

Gain and maintain use of SLOCs and designated sea space in order to protect and promote national interests: Discussion focused on protecting the commercial shipping of friendly nations.

Joint power projection ashore in order to strike the enemy and or gain or maintain access: No significant discussion beyond the tasks as written.

Overcome anti-access strategies to allow freedom of action: No significant discussion beyond the tasks as written.

Defend and secure our own access and deny others access to space and cyberspace: As with the Regional Issue that addressed space and cyber space, there was significant discussion on the wisdom of keeping them together here. One cell member was adamant that the two are in no way related even though there is significant infrastructure overlap. The debate ended with this wording and the idea that they are very different issues, but access to both must be protected.

Conduct standoff and penetrating ISR from sea-based forces to develop and maintain essential situational awareness: The piece of this cluster that did not come out in the bullet is the idea of conducting persistent Information Operations & Strategic Communications.

Conserve resources in order to mitigate the effects of resource scarcity: This idea centered on the military conserving fuel and other resources as well as powering its bases by alternate means.

Conduct survey and protection of resources in order to mitigate the effects of their scarcity: The U.S. military may find itself protecting commercial ventures (drilling, mining) or conducting survey operations to benefit commercial ventures, similar to what we did in the 1880 to 1920s when military forces enabled economic activity in foreign countries and on the U.S. frontier.

The four big consequences of the preceding tasks are high op tempo, high cost, potential for an arms race, and perception of imperialistic intent.

The cell spent a large block of time discussing partnerships in this scenario. Several interesting downsides were noted including the difficulty of interoperability and the strategic communications message sent by reliance on partnerships. Hostile blocs may see this reliance as a weakness and exploit it. Also, it was noted by some of the participants that military forces will always imply the potential for hostilities, and hence military forces are not always viewed as being benign; there are undesired consequences to forward presence.

Maritime Capabilities

This part of the discussion involved a robust discussion, particularly by a number of program advocates. The capabilities identification process yielded over a hundred individual capabilities, which were clustered into the following fourteen groups:⁸

- *Determine and provide appropriate response to threats against SLOCs as required.*
- *Strategic communications and effects based BDA*
- *Defend friendly cyberspace while conducting exploitation and offensive operations in adversary cyberspace.*
- *Conduct unfettered C2 of Joint military forces across the range of military operations.*
- *Deploy/employ/sustain forces from ship to shore in the face of anti-access capabilities.*
- *Staff the Joint maritime force to provide right skill sets to support current/emerging ops*
- *Sustain Joint Maritime forces in all assigned missions.*
- *Establish comprehensive persistent ISR system that supports freedom of action across the spectrum of Operation and all phases of operation.*
- *Grow capacity to coordinate actions of mutual interest in ungoverned or disputed regions.*
- *Use kinetic and non kinetic means to defeat enemy forces in the maritime domain.*
- *Operate adaptive force packages for fwd pres in the littorals/bloc contested spaces as required.*
- *Increase access to denied areas.*
- *Sustain operations against threats to friendly forces through spectrum of kinetic and non kinetic means.*
- *Conduct HA and medical intervention to influence allies and sway unaligned governments*

In addition, the cell provided the following insights during their capability analysis activity⁹:

- *Deterrence is bigger than just nuclear forces. It requires the leveraging of all instruments of national power, which provides a much broader set of options.*
- *Criteria for Prioritizing Capabilities:*

⁸ For time reasons, the moderator made the decision to divide the cell into groups and give them each a cluster or two to work on. Therefore, DCAP team was unable to capture the discussion that went into naming each cluster.

⁹ These insights were not developed by consensus, but rather are a listing of the inputs that were provided by the players during the capabilities analysis discussion.

- *Must relate to vital national interests, such as:*
 - *Homeland defense*
 - *Maintaining economic benefit*
 - *Maintaining access*
 - *Ensuring the stability of the global system*
 - *Preventing and responding to disasters*
- *Time- Which capabilities can be developed quickly.*
- *Options they provide the President*
- *Cost/Benefit*
- *Efficiently uses hydrocarbons*
- *Charters of the sea services*
- *Likelihood vs. consequence (Risk model)*
- *State of play of bloc competition*
- *Energy Security*
- *Requirements of the joint/Regional Combatant Commanders*
- *Coalition Partner considerations*
- *Prevent conflict and political/military competition*
- *Strategic Context- Prevention vs. preparation for war. At some point (i.e. when conflict is inevitable), concentrating on preventing war wastes resources that could be better utilized preparing for war.*
- *Force readiness*
- *Domestic opinion*
- *Focus on forward planning- Identify capabilities in order to prevent this future from happening*
- *World perception/overall implications on foreign policy*
- *Capability of the force structure. CNOs are measured by the force structure they leave behind (Prestige of the man, service).*
- *Future health of the force*
- *Continuity of the capabilities. Includes industrial base considerations.*
- *Sustains the country*

There was a good discussion on the how to choose criteria. One participant stressed that we must choose criteria based on enduring national interests, in that all capabilities must be able to be tied back to national interests. Another

participant countered that national interests can be an initial filter, a “go/no-go” filter, and that then other more specific criteria should be applied.

- *Risk Discussion*
 - *Risk of ignoring allies weakens U.S. bloc*
 - *Overspecialization of forces, doctrine, etc.*
 - *Force not optimized for threat environment*
 - *Reduces options*
 - *Costs to rebalance/adapt to new environment*
 - *Asymmetric threat*
 - *Bankruptcy: “Guns” vs. “Butter”*
 - *Strangle the tax base*
 - *Disruptive technology that renders a system(s) irrelevant.*
 - *Not recognizing changing demographics and social changes*
 - *Failure to recognize a threat/trend/technology*
 - *Inability to meet national priorities*
 - *Over outsourcing or privatization.*
 - *May lose core capabilities.*
 - *Inter-bloc arms race*
 - *In this scenario, you have a 3 way race.*
 - *Ignoring the implications of energy security*
 - *Can’t protect critical infrastructure*
 - *Manpower quality deficit*
 - *Manpower can’t leverage high tech capabilities*
 - *Overlook human requirements to use systems*
 - *Don’t share the same ethical standards*
 - *Too much reliance on Jointness*
 - *Failure to meet stated requirements for fleet*
 - *Focus on the near term, which allows the degradation of the industrial base.*
- *Hedging Discussions:*
 - *Remove assumption we will always be able to get the right people.*
 - *Leverage NGO/Interagency/Teaming with Schools.*
 - *Stop looking at personnel as a resource drain.*

- *Refine capabilities based assessment process.*
 - *Engage the joint concepts at the front of the JIC/JOC development process*
- *Develop a comprehensive energy strategic plan.*
 - *Get the DoD off the U.S. power grid.*
 - *Alternative fuels for.*
- *Invest in R&D in technology (Reverse disruption technologies)*
 - *Includes Science and Technology*
- *Transparency in DoD language so outsiders can understand what you are talking about.*
- *Human level interaction with the Interagency.*
- *Don't alienate industry.*
- *Develop general purpose forces (multipurpose) vice specialized or niche capability forces.*
- *Managing expectations.*
- *Increase coalition abilities at the high end of the warfare spectrum.*
 - *Most coalition/partner building activities concentrate on the low end of war.*
- *Adaptability raps up most of what we have discussed in hedging.*
- *Liberalize U.S. student visa policies to maintain technology edge.*
- *Final Cell thoughts:*
 - *The Tri-Polar alternative future highlights energy shortages, yet that did not come out clearly in the capability clusters.*
 - *Protecting maritime commerce will be critical, as merchants are unlikely to arm themselves.*
 - *Strategic deterrence (nuclear, conventional, diplomatic, etc.) was not adequately addressed.*
 - *Did not address ballistic missile defense.*
 - *The capability cluster list may provide the foundation for future gaming on force development.*

Appendix B: Composition of Player Cells

There were seven cells in GLOBAL 08. Six of the seven were regionally based (Africa, Asia-Pacific, Europe, Latin America, Middle East and Central Asia, and North America), while the seventh, the Global Cell, looked at their scenario from a global perspective. The composition of each of these cells is provided below, and is based on the parent organization that the player was representing at the game.

Africa Cell:

Cell Leads: USMC Flag Officer (BGEN) and USN Flag Officer (RADM(s))

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN	US Naval Forces Europe/Africa
USN	OPNAV N81
USN	Navy Expeditionary Combat Command
USN	Navy Warfare Development Command
USN	First Naval Construction Division
USN	Naval War College Strategic Research Dept
USMC	Marine Corps Combat Development Command Concepts
USCG	Headquarters, Coast Guard (CG-511)
USCG	Maritime Law
USA	Army Capabilities Integration Center
USAF	Headquarters, Air Force (A5X)
USSOCOM	Headquarters, US Special Operations Command (SOKF-J9)
US State Dept	Bureau of African Affairs
Ghana	Ghanaian Navy
Nigeria	Nigerian Navy (Headquarters, Area 7)
Regional Expert	Naval War College Regional Studies Group (Africa)
Regional Expert	University of Massachusetts-Dartmouth
Defense Industry	Boeing

Asia-Pacific Cell:

Cell Lead: USN Flag Officer (RDML)

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN (3 players)	US Pacific Fleet Plans and Policy
USN	US Pacific Fleet Intel
USN	US Pacific Fleet Logistics
USN (2 players)	OPNAV N81
USN	OPNAV N87
USN	OPNAV (QDR Integration Team)
USN	Naval Mine and Anti-Submarine Warfare Command (N9)
USN	Naval War College Strategic Research Dept
USN	Submarine Development Group 12
USN	Space and Warfare Systems Center Pacific
USMC	Headquarters, Marine Corps Installations & Logistics Dept
USMC	MAGTAF Staff Training Program
USCG	Navy Warfare Development Command
USA	Army Capabilities Integration Center
USAF	Headquarters, Air Force (A5R-J)
US State Dept	Bureau of East Asian & Pacific Affairs
USJFCOM	Headquarters, Joint Forces Command (J9)
USPACOM	Headquarters, US Pacific Command Judge Advocate
USSOCOM	Naval Special Warfare Command
USMARAD	Headquarters, US Maritime Administration
Australia	Australian Navy
India	Indian Navy
Japan	Japanese Maritime Self-Defense Force (JMSDF)
Korea	Republic of Korea Navy
Singapore	Republic of Singapore Navy
Defense Industry	SAIC

Europe Cell:

Cell Lead: USN Flag Officers (RADM(s) and RDML(s))

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN	US Naval Forces Europe
USN	OPNAV N81
USN	ONI Counter Proliferation
USN	Navy Warfare Development Command
USN	Space and Warfare Systems Command
USN	Naval War College National Security Decision Making Dept
USMC	Marine Corps Combat Development Command G3/5
USCG	Headquarters, Coast Guard (CG-532)
USA	Army Training and Doctrine Command
USAF	Headquarters, Air Force (A5X)
USJFCOM	Staff Judge Advocate
USSOCOM	Headquarters, US Special Operations Command (SOKF-J9)
US State Dept	German Desk
Italy	Stazione Navale Margrande
Turkey	Turkish Navy
United Kingdom	Ministry of Defence, DCDC
Regional Expert	Roger Williams University
Defense Industry	General Dynamics (Electric Boat)

Global Cell:

Cell Lead: USN Flag Officer (RADM)

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN	OPNAV N1
USN	OPNAV N2K
USN	OPNAV N3N5 (Legal)
USN	OPNAV N42
USN	OPNAV N5 Maritime Domain Awareness (MDA)
USN	OPNAV N5 Adaptive Planning
USN	OPNAV N5 Strategy & Policy
USN	OPNAV N5 Strategic Concepts
USN	OPNAV N6
USN	OPNAV N81
USN	OPNAV N931
USN	US Fleet Forces Command N02
USN	US Fleet Forces Command N3GFM
USN	US Fleet Forces Command N8
USN	Commander, Naval Installations Command N7
USN	Network Warfare Command
USN	Military Sealift Command
USN	Naval Air Warfare Center (NAWC)
USN	Naval Warfare Development Command
USN	Naval Postgraduate School
USN	Naval War College (Monterey Program Office)
USMC	Marine Corps Combat Development Command (MCCDC) Seabasing Integration Division
USMC	Headquarters, Marine Corps Plans, Policies & Operations
USMC	Headquarters, Marine Corps Programs & Resources
USCG	Headquarters, Coast Guard Office of Strategic Analysis
USA	Army Capabilities Integration Center
USAF	Headquarters, Air Force (A5X)
US Govt	Office, Director of National Intelligence (GMII)

OSD	OSD Policy (SOLIC-IC/F&R)
OSD	OUSD(AT&L)/SSE/Policy & Guidance
OSD	Proliferation Security Initiative (PSI)
USJFCOM (2 players)	Joint Concept Development & Experimentation (J9)
USSOCOM	Headquarters, US Special Operations Command (SOKF-J9) IW
USSTRATCOM	Plans and Policy (J5)
USTRANSCOM	J5/4-JW (War Games and Experiments)
US State Dept	USAID
US State Dept	EEB/TRA/OTP
Functional Expert	Shipping Industry (BIMCO)
Functional Expert	NGO (Citizens Development Corps)
Defense Industry	Lockheed Martin

Latin America & Caribbean Cell:

Cell Lead: USN Flag Officer (RDML(s))

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN (2 players)	US Naval Forces Southern Command (N5)
USN	OPNAV N81
USN	OPNAV 852
USN (2 Players)	Navy Warfare Development Command
USN	Space and Warfare Systems Center San Diego
USMC	Marine Corps Combat Development Command (MCCDC) Seabasing
USCG	Headquarters, Atlantic Area
USA	Combined Arms Support Command
USAF	LeMay Center for Doctrine Development and Education
USSOUTHCOM	Staff Judge Advocate
USJFCOM	Joint Concept Development & Experimentation (J9)
USSOCOM	Headquarters, US Special Operations Command (SOKF-J10)
US State Dept	USAID/DCHA/DG/EPP
Argentina	Argentine Navy
Brazil	Brazilian Navy
Chile	Chilean Navy
Columbia	Columbian Navy
Peru	Peruvian Navy
Regional Expert	Organization of American States (OAS) Political Affairs
Regional Expert	Organization of American States (OAS) / Georgetown University
Regional Expert	Retired DoS Foreign Service Officer
Defense Industry	IBM Global Business Services

Middle East & Central Asia Cell:

Cell Leads: USN Flag Officers (RDML and RDML)

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN	US Naval Forces Central Command
USN	US Naval Forces Central Command Theater Security Cooperation
USN	US Naval Forces Central Command Maritime Operations Center
USN	OPNAV N81
USN	OPNAV N5
USN	OPNAV N85
USN	OPNAV N88
USN	OPNAV JAG
USN	OPNAV QDR Integration Team
USN	Navy Warfare Development Command
USN	Naval War College Strategic Research Dept
USMC	Headquarters, Marine Corps Plans, Policies & Operations
USMC	Marine Corps Combat Development Command (MCCDC) Strategic Vision Group
USMC	MAGTAF Staff Training Program
USCG	Headquarters, Pacific Area
USA	Army Capabilities Integration Center
USAF	Headquarters, Air Force (A8XC)
USSOCOM	Headquarters, US Special Operations Command (SOKF-J9)
US State Dept	Near Eastern Affairs
US State Dept	South & Central Asian Affairs
Pakistan	Pakistan Navy
Defense Industry	Raytheon

North America Cell:

Cell Leads: USCG Flag Officer (RDML) and USN Flag Officer (RDML(s))

Cell Participants:

<u>Equity</u>	<u>Organization/Expertise</u>
USN (3 players)	US Fleet Forces Command Strategy, Policy and Doctrine (N5)
USN	US Fleet Forces Command Training (N7)
USN	COMSECONDFLT
USN	COMTHIRDFLT Innovation & Experimentation
USN	Navy Warfare Development Command
USMC	Headquarters, Marine Corps Plans, Policies & Operations
USCG	Headquarters, Coast Guard
USAF	Air Force Research Lab
USNORTHCOM	J541 Maritime Division
USSOCOM (2 players)	Headquarters, US Special Operations Command (SOKF-J9)
OSD	OSD-Policy (HD &ASA)
US State Dept	Western Hemisphere Affairs
US Govt	US House of Representatives, Office of Emergency Planning, Preparations and Operations
Canada	Canadian Navy Maritime Staff Headquarters
Mexico	Mexican Navy (SEMAR-CESNAV)
Functional Expert	NGO (American Red Cross)
Functional Expert	Shipping Industry (Chamber of Shipping of America)
Defense Industry	Northrop Grumman Analysis Center