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Executive Summary of Pacific Defender 2020

1. **Problem Statement.** In this era of great power competition, MARSOC must examine its abilities to shape the Philippines Islands Area of Operations and deter competitors throughout the Contact Layer while setting conditions to dominate through the Blunt Layer in the event of a conventional conflict in the South China Sea.
 - a. **Objective:** The purpose of Pacific Defender 2020 is to identify mechanisms, in a conventional maritime conflict scenario (South China Sea), Blunt Layer which allow MARSOC to better serve as a bridge for capabilities integration with SOF and deployed MAGTFs, while maximizing the complementary capabilities of each formation.
 - b. **Key Issues:** Pacific Defender 2020 examined the following issues:
 - i. Identify the key capabilities that MARSOC can provide to serve as a bridge.
 - ii. Identify gaps in MARSOC and the MAGTF's ability to effectively communicate in planning and execution phases of an operation.
 - iii. Identify what actions and activities do MARSOC and the MAGTF need to adjust in the short term to better maximize complimentary capabilities to succeed in the Contact, Blunt, and Surge Layers.
 - iv. Identify the Authorities and Permissions required in the contact, blunt, and surge, layers for MARSOC to act as a bridge.

2. **Scenario.** The game simulates the early stages of a major conventional conflict that has evolved into the “Blunt” phase of combat.
 - a. **Geographic Region:** Based in the Philippine Islands.
 - b. **Time:** 2020 and beyond
 - c. **Road to War:** The Peoples Liberation Army Navy (PLAN) began visit, board, search and seizure (VBSS) of U.S. and allied flagged freighters in international waters that the PRC considers as being within its Exclusive Economic Zones (EEZ). In order to counter these illegal searches and impingement of trade goods, the U.S. sent a Navy Task Force to monitor the sea lanes and escort civilian vessels through the contested waters. During a morning interdiction by a PLAN vessel, a U.S. Navy destroyer and a PLAN destroyer collided while maneuvering in the vicinity of a fleet of cargo ships.

In the days following this incident PLAN ships have been targeting USN vessels and shadowing them while in a heightened tactical posture. Several PLAN aircraft, UAV's and surface contacts have demonstrated aggressive and hostile actions towards USN forces in the region.

The night prior to the wargame, a USN Neosho Class Oiler was struck by a Ship to Ship Missile (SSM), 13 crewmembers were killed, and the ship sustained significant damage and was abandoned hours after the attack. USN Arleigh Burke guided missile cruisers responded to the attack and identified two PLAN type 52 destroyers

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within range of the support vessel. The USN launched SSM's against both PLAN vessels, sinking one and damaging the other.

3. **Player Role List:** There are 3 teams: *MSOC* (Marine Special Operations Company), *PLAN TF* (Peoples Liberations Army Navy Task Force), and *AFP* (Armed Forces of the Philippines). Throughout the three-day wargame players rotated teams. The players included three MARSOC staff, one Middlebury Institute of International Studies student, one Naval Cryptologist, and one Naval Postgraduate Student.
 - a. **Player Role Objectives:** MSOC and PLAN are competing to spread influence and set favorable conditions on the Philippine archipelago. They do this by winning objectives, which consists of exertion of influence on bases, comm nodes, and diplomatic centers. Both teams can achieve win criteria via exerting influence in one of two ways: (1) control a set number of objectives throughout the entire region or, (2) control every objective in the national capital region. If, in any turn, either MSOC or PLAN has achieved this win criteria, the game is over. Meanwhile, the AFP objective is met by denying both MSOC and PLAN from achieving their win criteria through turn 7.
 - b. **Available Resources:** MSOC and PLAN forces each begin with 60 resource chips that symbolize a team's influence, permissions, and authorities with regard to a specific objective. Each turn, a player can play a maximum of 10 resource chips, AFP has no resources; however, they prevent the other teams' spread of influence by neutralizing objectives controlled by either MSOC or PLAN. In addition to the resources, MSOC and PLAN have a special capability that can be used once per game. MSOC can utilize support from an Aviation Combat Element, thereby allowing them to "surge" 14 resources in one turn. PLAN forces can execute an A2AD capability that will remove 3 resource chips from any MSOC objectives.
 - c. **Relationships:** MSOC and PLAN TF are competing entities, while AFP is attempting to avoid conflict on their sovereign territory.
4. **Wargame Description:**
 - a. **Wargame Design:** Pacific Defender is a hybrid game, with closed planning and open execution phases of play. After each turn, and at the end of each game, facilitators conduct interviews with players in seminar format to ask questions and discuss tactics, reasons, limitations, and other pertinent details of the turn/game. Players were provided a packet containing the rules, their teams' specific objectives, and resources. Conditions for winning are different for each team, and resources are scarce. The first iteration of the game is played with the most basic rules and capabilities that allow the players to gain experience with the mechanics of the game. Once the rules are understood, rules and capabilities are modified to allow for deeper analysis and data collection.
 - b. **Wargame Execution:** Each turn consists of 10-minute closed planning sessions where each team decides how to spend their resources during the next turn. Each turn approximates a 24-hour day. After each closed session, adjudication occurs using random number generation in Excel format to determine which team wins influence

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over specific objectives in an open format, and players feedback and commentary are recorded by the facilitators.

5. **Methods, Models, and Tools (MMTs).**

- a. **Adjudication:** The White Cell Adjudication Team, which consisted of the game developers, decided the outcomes of probability events through an adjudication tool. The design team programmed this on Excel, and it did not favor either side based on their capabilities; however, as MSOC and PLAN chose to allot additional resources towards a given objective, the adjudication tool took this into account in its calculations.
- b. **Player Feedback/updates:** Facilitators compiled data via the use of a 5W data collection sheet distributed to each player that catalogs what moves are made, resource expenditure, diplomatic bidding, and provides space for the teams to write down any notes on why they decided to make the moves they did. Facilitators were assigned to each team and conducted interviews that would focus discussion on answering essential questions.

6. **Key Constraints, Limitations, and Assumptions.**

- a. **Constraints:** The development team operated under the following constraints:
 - i. **Time/scheduling:** (MARSOC not available during originally scheduled wargaming week) Required faster design and development, forcing focus on the Philippines vice a broader South China Sea scenario.
 - ii. **Manpower** (number of personnel required for role players): Game tests conducted by NPS volunteers with little Marine experience.
 - iii. **Classification:** Kept at the Unclassified level.
- b. **Limitations:** The following limitations impacted design and gameplay:
 - i. **Expertise** (no Marines on wargaming team, coordinating with NPS Marine students): Team had to seek MARSOC SME's on campus in order to validate game design.
 - ii. **Wargame Players:** conducted utilizing MARSOC personnel (non-limiting) and NPS volunteers (limiting). The team relied on volunteers the week prior to and during the wargame week to facilitate play testing, actual play, and AFP/PLAN insights and feedback. Volunteers had limited time to participate during wargame week.
- c. **Assumptions:** MARSOC G-5 agreed to the following assumptions:
 - i. The scenario was based on advancing the current geo-political situation into near future (1-3 years). This involved using open source news and unclassified reports to determine current state of affairs in the Philippine Islands.
 - ii. Initial point of aggression was defined by wargaming team in the Road to War section.
 - iii. A conventional maritime conflict is imminent in the South China Sea. In game design, this ultimately meant that both MSOC and PLAN were not attempting to de-escalate the situation. Meanwhile, the AFP team attempted to prevent either team from gaining a favorable foothold to limit Philippine involvement in a conventional conflict.

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7. **Study findings.** The wargame produced findings in response to five essential questions:
- a. **Essential Question 1:** How can MARSOC augment and support potential major combat operations in a SCS scenario?
 - i. Item: *Weight of the objective and identification of key objectives allows for opportunities at the periphery*
 1. Discussion: A prudent approach to the type of SOF campaign represented by this game—preparing the OA for major combat operations—is that an equivalent effort is afoot by a competing “Red team.” To understand and counteract a Red team’s effects, it is important to understand that they likely view objectives through different lenses. Each side will approach the OA with different ends (seize key infrastructure versus assure partnerships) and through different ways and means (economic versus military). To model this in the wargame, each team had slightly different win conditions and key regions could lead to victory.
 2. Observation/Recommendation: Because the win conditions overlapped but were not equal, the objectives did not represent the same importance to each team. Once a player began to focus on a specific objective, the opposing team was able to read the board and capitalize in other areas. In terms of MARSOC operations, this relates to personnel assignment, management and distribution in the AO.
 3. Observation: By identifying a key region that both teams could leverage to “win” the game, this opened up ample space on the periphery to garner winning conditions elsewhere. This is because the focus on the key region caused players to overinvest in the region. In terms of strategy in a conventional battle, the lesson is that convincing an opponent to invest heavily in one region can open up these peripheral opportunities.
 - ii. Item: *The mobility versus the information advantages*
 1. Discussion: Later iterations of the game allowed for players to garner either a “mobility” or “information” advantage, both of which resulted in slightly different game strategies. By seizing control of a majority of the bases, players had a mobility advantage and could rapidly move around the board. By seizing control of comm nodes, players had the information advantage and were given a warning when the opposing player moved into their region.
 2. Observation/Recommendation: Players that earned the mobility advantage tended to focus on peripheral objectives, while those with the information advantage focused efforts in only a few key regions and relied on their intel to react to encroaching opponents. While both had their benefits, players with the mobility advantage tended to act with more initiative. They also had the ability to deceive the player with the information advantage through low-cost “feints”—minor encroachments into the other player’s regions.
 - b. **Essential Question 2:** What are the key capabilities that MARSOC can provide to serve as a bridge?

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- i. Item: *Top mission sets utilized to set favorable conditions: SR, FID, and Security Assistance*
 1. Discussion: In major combat operations, SOF impact the environment by gathering critical information, undermining an opponent's will or capacity, and enhancing the capabilities of indigenous forces and the wider JIIM. During gameplay and post-game debrief, MARSOC players were asked to analyze which core MARSOC mission sets they would have needed to win influence at each objective. The mission sets that they could choose from included DA, SR, CT, FID, UW, Counterinsurgency, Security Assistance, and IO; there was also an "other" selection to allow for other inputs.
 2. Observation: In what amounted to be a UW campaign to set favorable conditions in the Philippine archipelago, the players predominately picked SR, FID, and Security Assistance as the mission sets that they saw pertinent to their objectives. These mission sets helped seize control in regions, then bolster influence to the point that teams could leave for other operations.
- ii. Item: *Presence in key regions is crucial*
 1. Discussion: Though SOF's role is more indirect in nature during major combat operations, their role is vital in facilitating access for conventional forces where it would otherwise be impractical. This is done through ensuring key partnerships and developing insights at both the local and regional levels.
 2. Observation: In order to be of value to a conventional campaign, MARSOC forces must set favorable conditions in regions that are central to conventional efforts or BPT rapidly do so. In gameplay, placing personnel in key geographic regions maximized players' movement and coverage advantages on the Philippine Islands. This allowed for adaptive COAs enabling flexible and responsive strategy depending on the decisions of the competing and ambivalent forces
- c. **Essential Question 3:** What are the gaps in MARSOC and the MAGTF's ability to effectively communicate in planning and execution phases of an operation?
 - i. Item: *Importance of regional, cultural, and language expertise*
 1. Discussion: Pacific Defender 2020 gameplay hinged on the regional, cultural, and language expertise of the Blue and Red teams. The designers built this into the game construct and was embraced and utilized by all players.
 2. Observation/Recommendation: Interviews of teams identified a gap in continuity and sustainment regarding cultural education and language proficiency in the SCS AOR. This training must occur at the appropriate time MARSOC team member's career. Discussions identified the need for deliberate development of assessed and selected personnel to fill key billets in the AOR. This will bolster MARSOC capabilities in the SCS AOR, which will strengthen its ability to shape the OA for major combat operations.

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3. Once personnel are able to affect regional gains, they must be given adequate time to keep this foothold until a complete hand-off can occur. Rapid turn-over of key billets can negatively impact these regional gains.
- d. **Essential Question 4:** What actions and activities does MARSOC and the MAGTF need to adjust in the short term to better maximize complimentary capabilities to succeed in the contact, blunt, and surge layers?
- i. Item: *Invest in gradually earned objectives*
 1. Discussion: Gameplay included the opportunity to invest in objectives that would not pay out for several turns. This offered the players the opportunity to, at low cost, attempt to spread their influence while focusing on the opponent's actions in the present turn.
 2. Observation/Recommendation: Taking risks by committing resources to objectives whose outcome was not immediately known was assessed by most players as too risky (potential loss of resources with no win/gain realized). Players tended to go after objectives they could see effects on immediately rather than spending resources on long term/future effects. This idea translates to present actions in the SCS, where MARSOC can make a series of light investments across the AOS that can either be solidified at a later point or "cashed in" should contingencies suddenly arise.
 - ii. Item: *Accounting for failure*
 1. Discussion: Because of the fragile nature of partner relations, UW campaigns do not always yield guaranteed effects for a broader campaign. As a result, persistent efforts that account for a loss of influential control will yield the best effects.
 2. Observation: Players that understood that some objectives would be contested—causing some resources to be lost—were better able to mitigate those losses and capitalize on their wins when they occurred. Multi-COA strategies tended to work best. In terms of MARSOC's short term efforts, it is vital to consider what a loss of investment may mean in some regions and how MARSOC could counter such losses.
- e. **Essential Question 5:** What authorities and permissions are required in the contact blunt, and surge layers to enable MARSOC to act as a bridge?
- i. Item: *Expanded Intel Support*
 1. Discussion: Much in the same way that players indicated their required mission sets for each objective, players also denoted what support that they would likely need during gameplay. Game facilitators prompted players to choose from the following support options to help accomplish their mission: Direct-Support Intelligence, Expanded Intelligence, Organic C4, Indigenous Support/Influence, EW/EMS, EBAO, Sustainment, Civil Affairs, or Other.
 2. Observation: Overwhelmingly, the players indicated that they would need "Expanded Intelligence," suggesting a need for intelligence capabilities

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beyond that organic to an MSOC. To gain an operational advantage in the contact, blunt, and surge layers, MARSOC teams engaged in a UW campaign or supporting major combat operations would need access to a broader range of sources.

- ii. Item: *Host or Partner DIRLAUTH*
 1. Discussion: A key part of Pacific Defender 2020 was the player's ability to deal directly with host or partner nations while dedicating resources to objectives. The modeled timeframe was very short, which implied either immediate or rapid approvals in these dealings.
 2. Observation: The ability to, at times, construct plans and arrangements directly with a host or partner force would allow MARSOC to rapidly consolidate their gains in contingency operations. In order to set conditions in the OA and seize the initiative, the maturity of MARSOC teams must be trusted to reach tactical or operational arrangements.

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