REGIONAL NET ASSESSMENT: AMPHIBIOUS WARFARE SIMULATION

LONG TERM STRATEGY GROUP

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EXECUTIVE SUMMARY

The Long Term Strategy Group (LTSG) conducted a live, human-player simulation to explore the potential dynamics of amphibious warfare in East Asia in 2020. The simulation included the participation of players representing the United States, Japan, and China. The simulation was held at LTSG's office in Washington, DC, and players interacted and communicated through a web-based geographic information system (GIS) platform.

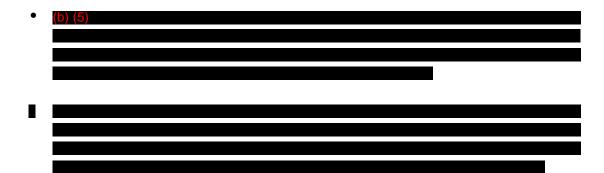
The opening scenario began with the seizure by China under cover of nightfall of two Japanese islands, and and an on the southern end of the **second** chain. The United States, though reluctant at first to engage in hostilities with China, decided to fully commit as per Article V of its treaty with Japan after China launched missile attacks on **second** The simulation concluded with an extended American and Japanese siege of the disputed islands as a prelude to an amphibious landing.

The simulation generated the following key findings:

- China's operational tempo substantially outpaced that of American and Japanese forces in Move One, leading to a situation where the alliance was forced to strike the islands prior to the achievement of optimal force concentrations in order to prevent China from achieving a prohibitive level of reinforcements. The disparity in operational tempos was traced to jockeying within the alliance due to the differing strategic objectives of the United States and Japan; meanwhile, China proceeded with executing pre-planned follow-up operations. This may suggest a need for studies of how to increase the alliance's response speed in the event of a geopolitical contingency, especially given recent reforms to the mandate of the Japan Self-Defense Forces (JSDF).
- Escalation dynamics were surprising, with each side misjudging the likely response to its deployments of force. China had deliberately avoided striking American assets in Move Two, not realizing that attacking was already sufficient to trigger American entry; the United States then retaliated by striking the Chinese mainland, which was China's own "red line" for escalation.
- After a certain degree of damage had been inflicted, political requirements began to supersede strategic calculation in driving crisis dynamics. Japan attempted to strike a Chinese carrier not because it judged that this would be strategically optimal, but because it needed a political victory after its humiliation over the disputed islands and at The same dynamic was apparent in Japan's support for a US-led suppression of enemy air defenses (SEAD) campaign, and in Chinese stubbornness after reinforcements were no longer feasible. These conclusions made participants generally skeptical of the possibility of off-ramps to end the conflict.
- Nuclear signaling produced interesting effects in the simulation. During Move One, after China deployed a number of DF-31 intercontinental ballistic missiles (ICBMs) out of garrison and into hiding positions, the United States was notified by intelligence assets that

Chinese DF-31s were leaving garrison. The United States interpreted this to indicate that China was purposely signaling its resolve in the conflict, while China, in fact, had moved the DF-31s out of garrison in order to keep them safe. The United States responded by pushing off ballistic missile submarines from port. China's only public display was a test of a nuclear-capable intermediate-range ballistic missile (IRBM) that would only be able to range Japan – making it less threatening to US interests. In the next move, China deployed ballistic missile submarines to the Bohai Sea, intending for this to be seen by the United States as a signal of its resolve. The United States, however, did not receive intelligence about these submarine movements, and therefore missed a potentially important cue from China.

The simulation raised several issues that may benefit from future research:



INTRODUCTION

The Long Term Strategy Group (LTSG) conducted a live, human-player simulation on 15 July 2014 to explore the dynamics of amphibious warfare in an East Asia scenario set in 2020. In particular, the simulation was designed to probe conflict dynamics, including concepts of operation and implications for the US-Japan alliance, following an ambiguous but hostile seizure of Japanese islands by China.

Subject-matter expert participants included LTSG staff, faculty from research universities, and military officers. Teams representing the United States (Blue), China (Red), and Japan (Green) were provided with orders of battle containing relevant in-theater and transportable units drawn from 2020 force projections, and were able to communicate amongst themselves, with other teams, and with the adjudicating White Cell throughout the simulation. White Cell assessed outcomes of armed interactions, diplomatic exchanges, and other courses of action undertaken by the teams. This activity occurred through LTSG's proprietary web-based geographic information system (GIS) and communication platform, which also enabled players on each team to review any tactical data associated with units that White judged would be visible to that team, including weapons systems, strike range, and intelligence, surveillance, and reconnaissance (ISR) capabilities.

The simulation included an opening scenario, two moves, and a roundtable on a third move together with a "hotwash" discussion reviewing the entire game, all taking place over eight hours and simulating around three weeks of real time. The remainder of this report describes each phase in order, and then briefly concludes with a list of further research questions inspired by the simulation. The Appendix of this report includes screenshots of the simulation map at the end of each move, an icon glossary, the simulation agenda, and a participant list.

OPENING SCENARIO

As the world turns the corner into 2020, Taiwan signs a peace agreement with the mainland agreeing to become a demilitarized, semi-autonomous state within the People's Republic of China (PRC). While American and Japanese leaders begin worrying about the fate of F-16 fighters and *Patriot* missile batteries still on the island, the favorable resolution of the Taiwan question also prompts a recalibration of Chinese willingness to test Japanese claims over airspace, waters, and islands.

A few months into the year, American and Japanese leaders wake to news of a nighttime Chinese invasion of the southern **merced** islands of **merced** and **merced** People's Liberation Army (PLA) forces have swarmed each island's minimal garrison under the cover of darkness, and available ISR reports full Chinese occupation, positions hardened against counterattack, and the total native population – between 90,000 and 100,000 total Japanese civilians – now under the mercy of hostile troops.

Deployed Chinese forces on each island now consist, Red learns separately, of 5,000 personnel made up of special operations forces (SOF) and marines. Having arrived via four Type 071 amphibious transport docks escorted by destroyers, PLA occupying forces also possess a mix of transporter erector launchers (TELs) containing surface-to-air missiles (SAMs) and anti-ship missile (AShMs). Between 500 and 1,000 Japan Self-Defense Force (JSDF) and Coast Guard forces were killed during the initial incursion. Japanese AShM batteries on both islands, in addition to nearby Yonaguni Island, were also incapacitated.

INITIAL FORCE POSTURES

Each team was presented with force positions and concentrations through LTSG's GIS software. Teams were able to see all of their own forces, but visibility of enemy forces was limited. The following images depict the starting force postures for each team: **Red Starting Force Posture**

Green Starting Force Posture



Green's starting force included realistic deployments of Japanese Ground Self-Defense Force (JGSDF) units across Japan's main islands, in addition to troop deployments on Green's garrisons on Green's main and Yonaguni were overrun by the initial Red assault.

Blue Starting Force Posture

Blue's starting force posture included standard deployments of long-range bombers based in the contiguous United States (CONUS), Guam, and Diego Garcia. In addition, Blue fielded three active carrier strike groups – two groups were preoccupied in the Persian Gulf and Mediterranean, leaving one for East Asia. Blue's forces in South Korea and Japan were deployed as per present-day standards, with the Eighth Army in South Korea and a number of US Navy and Marine Corps forces deployed in Japan.

MOVE ONE

OVERVIEW

In the first move of the conflict, Red successfully and substantially reinforced both disputed islands while Blue and Green struggled to overcome delay-inducing alliance dynamics. Red captured in the Spratly Islands; Green invoked Article V; and Blue mobilized for the without committing to militarily entering the conflict. The remainder of this section includes opening, intermediate, and concluding moves by each side, along with the results of the move adjudication by White.

OPENING MOVES: RED ENTRENCHES; THE ALLIANCE MOBILIZES

In the immediate wake of Red's nighttime surprise, Red focused on reinforcing its positions on and states while opening other crisis fronts; Green looked to draw in Blue and to save its civilians; and Blue mobilized forces but abstained from direct engagement prior to determining Red's intentions and objectives.

RED: ISLAND REINFORCEMENT & HORIZONTAL ESCALATION

Red moved rapidly and decisively through the morning, exploiting the confusion in the Blue-Green alliance generated by its pre-dawn lightning occupation of the islands to substantially reinforce its new positions. Regular patrol units supported by SOF were sent into the hills to hunt remaining Green forces; an arriving People's Armed Police (PAP) battalion established control over local governance and civil defense responsibilities; and Coastal Defense Brigades (CDBs) were moved from Fujian to each island. In addition, a battery of CJ-10 land-attack cruise missiles (LACMs), additional destroyers, and SAM battalions were moved on or near each island for further hardening and air defense capabilities.

Simultaneously, Red took advantage of its new peace agreement with Taiwan to link Chinese and Taiwanese Civil Aviation Authorities (CAAs), and announced an expansion of the Taiwan Air Defense Identification Zone (ADIZ) to include both **Example** and **Example** Air traffic control systems were instructed also to publish a notice warning airmen, shipping authorities, and civil and military aircraft to stay out of an established exercise area extending 100 miles around the two islands.

Finally, Red sought to horizontally escalate the conflict so as to further burden an already shellshocked Blue-Green decision-making infrastructure, requesting that North Korea both conduct missile tests directed at Green and sink a South Korean ship and damage assets near Dokdo Island with explosive ordinance – the latter act was to appear to have been the work of Green. When North Korea was not immediately responsive, Red SOF were sent to Dokdo instead – Red decision makers almost decided out of spite to leave North Korean signatures, but ultimately reverted to the original plan to leave distinct Japanese traces. As a further measure, Red also began deploying forces to the South China Sea, seeking to manufacture a crisis with the Philippines in the Spratlys over (b) (5) Frigates, destroyers, and reconnaissance assets escorted by combat aircraft all immediately set out from their respective bases, further accompanied by two diesel-electric submarines and an amphibious mechanized infantry brigade on a tank landing ship (LST) from the 1st Group Army.

This was all supplemented by the additional general deployment of Red seaborne assets in preparation for future operations, which included a (b) (5)

accompanied by a nuclear attack submarine, deployed to the East China Sea, with two diesel-electric submarines also sent off to the **sector** chain and a naval Surface Action Group (SAG) bound for the Philippine Sea.

GREEN: CIVILIAN & BLUE ANXIETIES

Green abstained from immediately invoking Article V of the Japan-US Security Treaty in favor of first acquiring a clearer picture of Red actions on the island, and conducting a thorough strategic analysis. What was the composition and disposition of the Red force that took the islands? Given the surprise, confusion, and eventual loss of communications with the **surprise** and **su**

At a minimum, limited remaining communications with island civilians provided Green commanders with some degree of awareness of Red movements – PAP and PLA landings, the pacification of civil defense wardens, and the progressive loss of civilian contacts were all developments made available to Green decision makers, although citizen reports became increasingly hysterical and possibly exaggerated as time went on. Further intelligence-gathering was attempted through P-3 *Orion* flights and F-15J reconnaissance missions.

After a lengthy discussion, several Green priorities clearly emerged. First, civilian protection was paramount. Given that Red forces now had effective military control over perhaps 100,000 Green nationals, Green decision making became centered on exactly how Red forces might treat these civilians in reaction to possible Blue-Green efforts to retake the islands. Would, for example, a blockade lead to hostage-taking if cut-off Red forces felt backed into a corner? What implications would that then have for public opinion toward the Green government and the sustainability of further military actions? Green immediately made a request to Blue to use psychological operations aircraft to broadcast to the trapped civilians on the islands in order to reassure them that they had not been forgotten.

Second, it was rapidly becoming apparent that Blue and Green had to begin limiting the alarmingly large flow of Red reinforcements to the islands as soon as possible, as Green already assessed that it was unable to launch an amphibious assault without the help of Blue. If Blue reinforcements from further afield became necessary to produce the concentrations required to unseat Red, the situation might evolve into an extended stalemate, which Green saw as a strongly negative outcome. Leaving 100,000 citizens indefinitely stranded on occupied islands would be an unacceptable development.

These fears about being unable to retake the islands also prompted several maneuvers to sweep potential sea mines between and a and the Green ordered Japanese Maritime Self-Defense Force (JMSDF) mine-sweeping helicopters and ships into action, and made a request for help from equivalent US Navy forces. In addition, Green requested that Blue (b) (5)

assessed that it could gain a better picture of the composition and posture of Red forces, which would help not only for planning but also for targeting in a potential future amphibious assault. Blue responded affirmatively to Green's request, and the (b) (5)

Finally, drawing Blue into the conflict would be critical. Red possessed in-theater dominance over Green in terms of forces that could be brought to bear. As such, due to the somewhat patchwork state of information available to Green at the start about initial Red actions on **second** and **second** Green began to think of ways to provoke unambiguous Red assaults on Green ships so that Blue would have no choice but to order an aggressive commitment to Article V. This was a special concern in light of the assessment that Red would seek to isolate the conflict to a Red-Green affair.

BLUE: STRATEGIC MOBILIZATION & GREEN ANXIETIES

Blue began by attempting to assess the degree of Red strategic commitment to holding and How far would Red be willing to escalate? Would Red fire DF-21s at approaching Blue carriers? Why had Red taken the islands in the first place? Was it, perhaps, only interested in using them as a bargaining chip to solidify its position in Taiwan, or did it intend to absorb them into China proper? Given the lack of clarity about the degree of Red strategic commitment to the defense of the occupied islands, Blue was unwilling at the very outset to deploy carriers to within land-based precision-strike range of Red.

Nevertheless, Blue immediately began mobilizing available troops in preparation for either a blockade or an amphibious landing of the disputed islands, placing Marine Expeditionary Units (MEUs) on alert, refueling and sending out of port most Pacific-area ships, and beginning a partial surge of submarines out of port. "Leave," as one Blue decision maker stated, "is canceled in the Pacific." Blue also sought to begin military planning, tasking planners with identifying a low-risk, medium-value, high-publicity target to signal to Red and Green that Blue was "on board."

In a privately reached conclusion identical to that of Green, Blue also knew that speed would be of the essence in any attempt to dislodge Red – with continued buildup of Red forces and a lack of Blue's own nationals in harm's way, the human cost of attriting hardened Red defenses might quickly become prohibitive for the American democratic decision-making system. Cutting off further reinforcements from the Red mainland became an immediate target for planning.

INTERMEDIATE MOVES: RED DIVERSIFIES; THE ALLIANCE DELIBERATES

While Blue and Green finished their initial strategic assessments of the situation and met to begin coordinating a potential military response, Red deliberately broadened the crisis by seizing and initiating economic and political warfare. (5)

THE ALLIANCE: GREEN MUST LEAD THE WAY

What would be the terms and command structure of a coordinated assault on the Red-occupied islands? In particular, the primary interplay in Blue-Green communication revolved around Blue's desire to avoid a direct Red-Blue conflict if possible, combined with Green's need to draw a strong Blue commitment to guarantee saving its territory and citizens. As a result, Blue repeatedly insisted throughout discussions that Green must initiate conflict with Red, asserting that "they [Green] need to take or give first blood...the first move has to be a Green move...the first vessel that goes to the bottom has to be Green." Blue not only was worried about American public opposition to shedding American blood on behalf of Japanese assets but also assessed that an initial engagement by Green would permit a better analysis of the degree of Red resolve. In one planner's words, "Once Green has engaged Red, we will hope to find out if Red is prepared to only fight Green or if it has the intent to also fight us."

(b) (5)

Reconnaissance was sent out in the form of submarines and it was suggested that a blockade between Taiwan and the mainland might be instituted later, but this was never followed up on. Red had no further problems with Taiwan in the remainder of the simulated timeframe.



RED: SHOAL SEIZURE & NON-MILITARY WARFARE

While the alliance worked to establish mutually acceptable terms for military cooperation, Red continued to escalate the conflict militarily, economically, and diplomatically in order to overburden what it perceived to be uncertain Blue-Green mutual commitments.

First, militarily, in the South China Sea Red followed up on its prior deployments by landing SOF on (b) (5) and taking as prisoners the Philippine crew of the beached LST there. In response, Blue began to mobilize an (b) (5) eventual deployment to the Philippines, moved refueling assets and fighter jets into Singapore, and moved the Fifth Fleet toward the Maldives. Blue also moved a set of bombers near the Persian Gulf, in order to deter opportunistic Iranian aggression possibly triggered by the absence of the Fifth Fleet. Green separately pledged money and support to the Philippines, and began conversations about naval cooperation.

Second, economically, Red also began to apply pressure to Green. In addition to cutting off rare earth exports to Green, Red began to instigate demonstrations outside Green-owned factories all over its east coast, publishing incendiary reports in state media and deploying agents to deliberately incite individual protests.

Third, diplomatically, Red attempted to draw international opinion to its side, to keep Blue out of the conflict for as long as possible, and to delay decisive Green military action so as to permit a further buildup of forces on and and the Red argued forcefully that and and the were in fact rightfully Chinese territory, and that its actions were merely correcting an act of Japanese imperialism. In announcements at the United Nations and in international media, Red presented archaeological evidence of stone and shell tools on the islands from thousands of years ago which were also found in Taiwan, but not on thus showing that the islands were originally Chinese. Indeed, Red-Green conflicts over rights to the islands dated back to the Meiji Restoration of 1872, when the Japanese government incorporated the Sakishima Islands, including and to Japan after China's defeat in the Sino-Japanese War of 1894-95. Red therefore asserted that it was only reversing an exploitative, imperialist violation of its dignity. Blue, although it was mainly preoccupied elsewhere, managed to offer contrasting assessments of the situation. In

accordance with requirements set forth in the Japan-US Security Treaty, Blue reported Red's aggressive actions to the UN Security Council and pushed a resolution to condemn Red's behavior as unacceptable. This resolution was vetoed by Red.

In terms of Blue-directed actions, Red attempted to delay direct Blue entry into the conflict to the maximum extent feasible. Diplomats from Red asserted that its moves were not intended to threaten Green as a whole or serve as a prelude to further territorial incursions, as it was merely defending historical and rightful claims to the islands. According to these diplomats, **maximum** and **maximum** were originally settled and fished by Chinese fishermen, and customary international law would find that historic usage was the proper basis by which to determine who had a right to settlement.

When Blue flatly ignored Red government-to-government overtures, observing that the outreach was not genuine, Red attempted to influence Blue's democratic electorate. Red bought full twopage ads in major American newspapers defending China's historic claims to the islands, as well as highlighting Japanese atrocities in the Sino-Japanese War of 1894-95. The Red ambassador in Washington sought to meet with the Speaker of the House, the House Minority Leader, the Senate Majority and Minority Leaders, and the Secretary of State, in each case encouraging them to allow Red and Green to resolve historic issues on a bilateral basis, arguing that it was American pressure at the end of the Qing Dynasty that led to the present territorial complications in the first place. Congress was encouraged to act as a counterweight to executive adventurism, and Confucius Institutes encouraged educational campaigns on American campuses about rightful Chinese defense of claims to the occupied islands. All of this resulted in large monetary interests lobbying the White House not to bring Blue militarily into the conflict, arguing that escalation would put Blue in another Great Depression; in response, Blue command began conducting its own domestic political counter-warfare, "stick[ing] a pin" into the sides of rabidly anti-Chinese political elements to stir up support in Congress for "going back in time with regard to Taiwan."

Finally, in terms of Green-directed action, Red diplomats in Tokyo sought to meet with the Green Ministry of Foreign Affairs, in order to stall for time through long-winded and highly-pedantic discussions of competing historical claims to the islands. These Red representatives were instructed to make impossible demands, such as Green reparations for Red civilian casualties at Port Arthur during the Sino-Japanese War, in order to stalemate negotiations.

Green, for its part, willfully ignored Red outreach, reasoning that with Green military casualties and 100,000 civilians under Red control, the scholarly question of who might have settled the islands first in ancient times was only a distraction. Instead, Green reached out to request assistance from Australia and South Korea.

CONCLUDING MOVES: GREEN COAST GUARD ADVANCE

At the end of the move, Green decided that it could wait no longer to take action, as it acutely feared that the situation would degenerate into a Cold War-style stalemate with trapped Green civilians on and a solution. As Blue was still reluctant to fully commit, Green made the decision to send Coast Guard ships to approach Red ships around the occupied islands. These ships were ordered to close in on the Red ships until fired upon, and were to be shadowed by destroyers of the JMSDF. It was anticipated that Red forces would fire on the Green ships, thus providing Blue an unambiguous *casus belli* under Article V.

ADJUDICATION

Adjudication noted that Red had successfully and significantly reinforced both islands in question with PAP and PLA Navy (PLAN) forces, including SAMs, had established effective control over Green civilians, and had cut off any remaining civilian communications from the islands to Green. **(b) (5)**, however, did successfully land on the islands, and in combination with tasked ISR assets, Green and Blue gained a clear picture of the scale and composition of the occupying Red forces. White also noted that Red's operational tempo dramatically outpaced that of Blue and Green. White observed that while Blue and Green worked to overcome delay-inducing alliance dynamics, Red executed pre-planned follow-up actions to its initial invasion of the islands.

Green's Coast Guard vessels were indeed fired upon and sunk by Red ships. In the aftermath, a Green destroyer was sunk by Red missile boats, which were then destroyed by remaining Green destroyers, which were then in turn destroyed by island-based Red anti-ship missiles. Red amphibious ships were also sunk by Green torpedoes while west of the occupied islands.

Move Two

OVERVIEW

As the conflict stretched into the second move, Red launched attacks on with mixed success. Blue and Green launched suppression campaigns against the disputed islands, degrading defenses but not sufficiently to guarantee a successful amphibious landing. Green separately attacked a Red carrier in an effort to damage Red prestige but failed to sink it. Blue struck the Red mainland in order to destroy an over-the-horizon radar being used to target alliance forces. The remainder of this section includes opening, intermediate, and concluding moves by each side, and the results of the move adjudication by White.

OPENING MOVES: THE ALLIANCE PREPS A SIEGE; RED STRIKES

With the invocation of Article V, the alliance met to prepare for a siege to take back the disputed islands. Blue still did not regard itself as committed to shooting exchanges with Red, however, until Red struck Green assets.

THE ALLIANCE: BLUE HESITATION & GREEN URGENCY

The primary alliance dynamic remained Blue hesitation about full commitment to a Red-Blue shooting war juxtaposed against Green's sense of urgency about securing the safety of its citizens. Green was sure that it required substantial Blue assets for a tactically viable assault on Red island positions – not only would Blue aircraft be necessary to establish air superiority and mount a suppression of enemy air defenses (SEAD) campaign in advance of a potential amphibious landing, but simple numbers also meant that physically retaking the islands would require the participation of US Marines.

In particular, Green assessed that it would need a 3:1 force ratio in order to overcome hardened Red entrenchments on each island. Since Green estimated that it could only muster sufficient forces to establish a 1:1 ratio, at least (b) (5) in addition to air support would be the minimal requirement, with (b) (5) combined with (b) (5) as the ideal scenario. There was some internal disagreement as to the actual troop numbers required for a successful landing, given the possibility of movement ashore of anti-ship assets on, or strategic feints between, the islands, but all were in agreement that an all-in commitment from Blue would be necessary for a traditional amphibious landing.

In the absence of such commitment at the present moment, Green decided that isolating the islands from further reinforcement might be the most prudent course of action. At the least, this would allow further time to set up a joint operation with Blue – otherwise, a continued flow of reinforcements from Red would negate altogether the possibility of taking back the islands. Further, independent of Blue's willingness to carry them out, direct strikes also would run the additional risk of civilian casualties. Conversely, isolating the forces on the island would not, at least immediately, endanger the lives of the trapped Green nationals, although there was some worry as to whether desperate Red forces cut off from the mainland might try to take hostages.

On the other hand, Blue's internal deliberations were that it was not yet strictly at war with Red, despite Blue submarines having sink-on-sight rules of engagement (ROE) vis-à-vis Red assets. Rather, it was hoped that Blue support would change Red's calculus sufficiently so as to avoid the costs and risks of an all-out ground invasion of the disputed islands. As such, Blue was reluctant to commit to Green's desired 3:1 force ratio, and instead suggested landing anti-ship missile batteries in the area of operations to hold off Red's fleet.

RED: ATTACK ON

In the meantime, Red anticipated an assault on its island positions, and decided to degrade available Green assets for such a purpose by striking all Green assets at Critically, Red did not currently regard itself as in a state of active hostility with Blue, and sought to limit the conflict to a Red-Green altercation; as such, Red refrained from attacking any positions at which there was a visible Blue presence.

In particular, Red struck Air Base with DF-15As, as well as Green airborne early warning and control (AEW&C), *Global Hawk*, helicopter aviation, and multi-role fighter squadrons; this was supplemented with strikes on Green's nearby replenishment fleet and three SAGs with submarine-launched cruise missiles (SLCMs), as well as a cyberwarfare strike on green power grid. Target selection was aided by an over-the-horizon (OTH) radar site on Red's eastern coast. Increased combat air patrols were also simultaneously ordered over the Senkaku Islands, and and in the areas of Hainan and Bohai.

In the aftermath of the resultant skirmishes, Red's actions met with decidedly mixed results. The AEW&C squadron was successfully struck, as was one Green SAG, but was shielded by its air defenses; a Red submarine assaulting Green SAGs was sunk; and a Red SAG north of was also sunk in retaliation.

Interestingly, Red did not view its series of actions as a provocation substantially beyond what it had already done – on the grounds that it had already struck and indeed occupied and both non-mainland Green islands, and it had deliberately avoided Blue assets positioned at As such, these latest strikes seemed to Red decision makers to be both a logical extension of securing their position on the occupied islands, and also not a qualitatively distinct step up on the escalation ladder.

INTERMEDIATE MOVES: GREEN FIRES AT A CARRIER, RED CORRALS GREEN CITIZENS

In the aftermath of Red's military actions on Blue committed fully to military action against Red, viewing the former's actions as an unacceptable escalation that put Blue service members and civilians at risk. Green felt obligated to inflict reciprocal damage on Red assets, opting to attempt to strike a Red carrier so as to inflict a loss of prestige. Blue attempted to retake (b) (5)

THE ALLIANCE: METHODS OF RETALIATION

The alliance was now committed to some kind of coordinated retaliatory military action. Not only were missile strikes on viewed as escalatory since targets had included dual-use airports that served commercial flights in addition to JSDF forces, but attacking itself was also seen as much closer to constituting a direct strike on the Green mainland. Even more than the two occupied islands as a target of missile and cyber strikes inspired strong Green nationalist sentiment. In the words of a Green decision maker, "The paradigm is completely changed now." Blue viewed the strike as particularly escalatory since it inevitably put thousands of Blue service members at risk. Debate within the alliance quickly centered on how exactly to retaliate.

First, was the Red mainland yet in play? Since Red had already launched strikes against Green assets from the mainland, one view was that return strikes against the mainland were fully justified. However, it was noted, Green itself lacked the independent capacity to strike, and thus the responsibility to carry out such an attack would fall to Blue. Moreover, concerns were expressed about what the Red reaction might be, and what sorts of end-states further escalation would engender. Cyber attacks on mainland radars were also suggested as a way of enhancing non-mainland strikes, although it was observed that waiting for results in this arena might consume time that the alliance did not have.

Second, what of economic methods? Thus far, Red had deliberately ceased rare earth shipments to Green and incited riots outside Japanese factories; it was suggested that Blue-Green commercial sanctions, in coordination with the EU and South Korea, might be of substantial utility, targeting the great majority of Red's economic partners. In addition, Green initiated a dialogue with Australia to discuss freezing Red assets and seizing exports of raw materials to Red. The Australian response was positive but cautious; shipping would be halted due to danger while there was no ceasefire, while a decision on further actions when the shooting stopped was withheld. Finally, Blue began to fly jets over the Straits of Malacca to demonstrate potential control over shipping.

Third, how could the theater of operations be expanded? It was suggested that widening the area that Red was obligated to defend might ease the way for a later counter-invasion of and as Red forces would then be spread more thinly. In this view, focusing on (b) (5) would provide an opportunity not only to impose a badly needed strategic loss on Red but also to rally the Philippines and other regional actors around the alliance. Moreover, conflict around the shoal would be more suited to available in-theater MEUs.

Finally, what was the goal of any such form of retaliation? In one decision maker's view, the ultimate goal would be to force Red to pay such a high price in attempting to take the islands that any future such efforts would be out of the question. In another's evaluation, the short-term goal regardless would be to inflict retaliatory pain on Red. Intriguingly, one Green participant accurately diagnosed that Red's limitation of its strikes to **second** was probably intended to deter attempts to retake the occupied islands while avoiding escalation to attacks on the Red and Green mainlands and the substantive entry of Blue, but it was assessed that Green could not afford, politically speaking, to fail to respond dramatically to attacks on **second** and the other islands. Memories from World War II would still play a role in spurring a large public reaction.

BLUE: ABANDONMENT OF THE SHOAL

In accordance with the above discussion, Blue deployed an amphibious ready group (ARG) accompanied by a destroyer squadron to retake (b) (5) These assets, however, were met by a previously deployed Red aircraft carrier operating around the South China Sea. The carrier's presence led Blue to assess that an attempt at landing would be inadvisable. As such, Blue forces retreated without engaging Red.

GREEN: ATTEMPTED CARRIER STRIKE

Green privately decided to strike a Red aircraft carrier, which it thought would inflict a large psychological blow on Red. Green feared that Blue would see this move as excessively escalatory, and therefore did not include the idea in alliance discussions; however, Green felt obligated to target Red assets in a way that would also damage Red's "face" (*mianzi*), to retaliate for the humiliation that Red had inflicted through the bombing of

Green fully expected that Red would attempt strikes against its mainland if efforts to sink the carrier were successful. However, Green decision makers also judged that it was "almost desirable politically if the Japanese mainland shares the war with for the mathematical in addition, it was assessed that without further action there was substantial risk that Blue would not proceed with a full counter-invasion of the islands, which could in turn lead to an end-state that left the islands firmly in Red's grip. This would be a gross defeat and national humiliation for Green, with the government also unlikely to survive politically. As such, striking the Red carrier was seen as a necessary action to stave off a catastrophic default outcome. Green also reasoned that even if it failed to sink the carrier itself, it could also attack refueling, replenishment, and logistics assets in the vicinity with its submarines; since Red anti-submarine warfare assets were not in theater in mass or particularly effective, the risk was judged to be relatively low.

RED: NON-MILITARY WARFARE & NUCLEAR POSITIONING

Simultaneously, Red both expanded its non-military warfare tactics and continued its nuclear positioning. In terms of the first, Green nationals in major cities and at Chinese universities were rounded up and confined in predetermined areas on the grounds of protecting them from the nationalist anti-foreign protests that Red had incited earlier. Further, Red also impounded Green property across its major industries, and halted all commerce out of Red with Green. This constituted an implicit threat by Red to Green nationals and assets not only on the disputed islands but also on the mainland, as Red now held a substantially larger number of Green nationals under effective military control – were Green forces to effectively isolate Red soldiers on the two islands, Red would now have a reciprocal set of stranded Green citizens corralled in major Chinese cities. In addition, Red shifted a nuclear attack submarine into the vicinity of Blue's Guam ARG, moved ballistic missile submarines into their Bohai Sea bastion, and deployed its remaining nuclear attack submarines toward the second island chain.

CONCLUDING MOVES: THE ALLIANCE PREPARES TO RETAKE THE ISLANDS, TARGETS RED MAINLAND

Finally, the alliance opened a full suppression campaign against **sector** and **Blue** and **Blue** made the decision to strike Red's OTH radar located on the mainland. The strike was designed to be discriminant, using precise cruise missiles to limit collateral damage.

The suppression campaign consisted of Blue and Green forces engaging Red naval forces around and coordinated *Tomahawk* strikes from Blue ships, Green strikes on Redcontrolled runways with F-35s, and an extended SEAD campaign using primarily Blue assets. In particular, Blue had mobilized and scrambled bombers and fighters CONUS, Kadena, Guam, Diego Garcia, and Hawaii, resulting in a massive combined bombing campaign.

Green was initially hesitant to allow Blue to begin large-scale strikes – even limited to SAM sites – on the islands for fear of causing civilian casualties. Blue assured Green that the SEAD campaign would be very precise and would only cause limited collateral damage. Blue did warn, however, that follow-up strikes to take out entrenched troops and positions – in preparation for an amphibious assault – would likely incur much higher civilian casualties. Green also had to accept the possibility of civilian losses as a result of the cut-off of supplies to the islands that would lead Red to starve Green civilians to continue feeding its troops. In the end Green acceded to the operation, and indeed was reassured by the heavy Blue involvement in the SEAD campaign, as well as the promise of a potential follow-up amphibious assault depending on the effectiveness of these initial strikes.

ADJUDICATION

The adjudication covered the net results of the second move. Red's missile strikes on Green assets on as well as on nearby SAGs, were adjudicated to have been moderately successful.

With surviving Green SOF hiding among friendly civilians providing targeting data and extensive use by Blue of decoy missiles to confuse radars, the alliance bombing campaign against the occupied islands successfully destroyed most Red island SAMs. Red forces, however, still maintained anti-ship missile batteries, adopted defensive entrenched positions in response to the bombings, and prepared to strip civilian stocks of food and fuel on the islands. It was estimated that occupying Red forces could live off of civilian resources for at least two weeks without inducing substantial unrest. As such, the net outcome was that the ground forces on the islands still seemed too overwhelming for a direct amphibious assault, though nearby Red ships and SAMs were successfully attrited. As such, conditions seemed ideal for a blockade.

Separately, Green's submarines attacked but missed the Red carrier. Turning to the next target, the submarines fired torpedoes at and sunk a refueling vessel that was trailing the carrier.

Finally, a Blue attack with cruise missiles on a Red mainland OTH radar succeeded with no civilian casualties.

ROUNDTABLE & ASSESSMENTS

OVERVIEW

The simulation concluded with a roundtable discussion of additional actions that would have been taken during Move Three by each team. This was followed by a "hotwash" discussion among all participants in the simulation assessing what transpired. Participants generally agreed that Green and Blue had no choice but to enforce a blockade, that Red would have responded with significant escalatory strikes, and that off-ramps for Blue, Green, and Red would have been difficult to find, so that the conflict would likely have continued beyond the events of the final move.

A GREEN-BLUE BLOCKADE OF MILITARY NECESSITY

Although Blue and Green attempted to pull their alliance in different ways, with Green seeking to draw Blue into a clearly declared war and Blue in turn preferring a more incremental approach, both agreed that a blockade would have been immediately necessary, following the SEAD campaign, to stop further Red reinforcement. The primary dynamic was described by participants as, "The Japanese are saying, 'We need to get them off the island,' the United States is saying, 'We need to wait for the right conditions.'"

Green's primary objective was to avoid a military stalemate which would leave its perhaps 100,000 civilians in uncertain, deadlocked territory. While the alliance assessment was that a 3:1 force ratio would likely be required to guarantee success in an amphibious assault, which implied up to six US Marine battalions combined with Green forces to retake a single island, Green would have pushed for an earlier landing even with conditions being imperfect. In the words of a Green decision maker, "We were not going to *de facto* consign these islands to the Chinese like a Northern Territory."

Blue preferred an incremental perspective, gradually threatening escalation up "to a point where Blue had to either kick in the door or have Red back off." In other words, Blue did not wish to immediately land ground forces to fight a bloody infantry battle against dug-in Red troops. Rather, decision makers would have preferred a long blockade, hoping for Red to eventually pull troops out due to a lack of necessary supplies.

Either way, however, both agreed that initially destroying nearby Red sea and air assets and then imposing a blockade was a necessary first step. Endless reinforcement from Red would endanger both Green civilians and reduce the probability that Blue could incrementally increase costs to Red to force withdrawal from the occupied islands. One participant noted that an immediate landing would have been technically impossible in any case, as the distances involved in bringing US forces to bear meant at least a month to move battalions from San Diego or the East Coast into theater. Another participant, however, disagreed with this assessment, holding that the primary challenge of an amphibious landing on the two islands would merely be establishing air superiority, and that Blue's local amphibious warfare assets were sufficient to breach the island defenses and secure landing zones for more forces.

MASSIVE RED RETALIATION

Red assessed that its response in a third simulated move would have been massive retaliation, striking both Green and Blue ARGs and carriers. It did not think that it would have contemplated abandoning the disputed islands.

Indeed, for Red, an attack on its mainland was a previously discussed trigger for further escalation, since in the second move of the crisis Red had deliberately refrained from striking either the Green mainland or Blue assets. At the end of the second move, Red had ordered forces to come within striking distance of Blue and Green ARGs and carrier task forces, and a simultaneous attack on all such available targets would have been ordered in response to such escalatory Blue and Green attacks.

Intriguingly, however, Red participants did not actually think that the strike on the mainland OTH radar would have prompted nuclear escalation or an open declaration of World War III. Given Chinese war-planners' understanding of US doctrine, they might accurately perceive the limited and surgical intent of the OTH radar strike.

The trigger for Blue was striking the OTH radar had not been seen as an escalatory act likely to provoke military action beyond what Red had already undertaken. Seemed to be the line where Blue could no longer back off putative treaty obligations in any substantial way without endangering American Pacific preeminence; and given that it would be difficult to maintain a secure force posture blockading the islands without wiping out the OTH radar, Blue saw the OTH radar strike as a logical extension of its SEAD campaign.

For Red, however, it was assessed that no level of attrition of its assets on the disputed islands would have moved it to withdraw. Red had already prepared for a grim situation there in Move Two when it assessed that it was unable to further resupply the islands. In addition, based on the history of Chinese military operations, the Chinese Communist Party (CCP) leadership would possess a substantial willingness to allow its own military assets to suffer slow attrition for the purpose of maintaining a political advantage in negotiations with Blue and Green.

NO EXIT

The majority of simulation participants did not assess that off-ramps were, or would have been, available for their side, regardless of team. Green had suffered too many losses to accept a stalemated situation on the islands; Blue felt an obligation, given previous escalation, to honor its alliance commitments; and Red could not withdraw without dramatically losing face.

GREEN: BLUE ENTRAPMENT & POLITICAL RETALIATION

First, Green decision makers had assessed that they needed an unambiguous shooting war. This was motivated by a need to draw in Blue in order to field the necessary forces to unseat Red forces from the disputed islands, no matter the potential risks of escalation. As one Green player put it in response to a query about whether Green's goal was "to create conditions where it was politically acceptable for the CCP to withdraw,"

My first responsibility was to bring to bear an offensive capability that would erase you [Red] from the islands, period...You're talking 90,000-100,000 civilians of all ages on these two islands; looking at the abduction issue with 17 Japanese by the North Koreans, this is a big thing, and I don't think there's anything Japan could do, politically, other than getting these islands back.

Another participant suggested the Green might have settled for the safe return of the civilians, but Green objected that this might have only increased pressure on the government to retake the islands, as there would be large tent cities and internal refugee flows covered all over Green national media, with an accompanying sense of outrage. As such, fearful of Blue "weasel[ing] out" of its alliance commitments, Green felt obligated to ignore Red diplomatic overtures, to push Coast Guard ships toward Red naval vessels in Move One, and to support a SEAD campaign in Move Two.

Second, there was also an independent political need to inflict retaliatory costs on Red. In Green's words, "You can't say that you're going to invade someone's country, kill 500 people, destroy their property, and then wish for a soft landing." The attack on had also been an escalation trigger for Green – especially because, as one Green player put it, "the country had previously sacrificed to a foreign invader." Additionally, given that the JSDF has a practice of recruiting from a certain region for each unit, killing 500 Green soldiers would mean the complete devastation of several towns, creating a situation comparable to all the military families in Virginia suddenly losing their soldiers in an escalatory enemy strike.

Both of these dynamics contributed to Green's decision to attack a Red carrier. Although they had been warned against the action by Blue, it was seen as necessary to produce a "win" out of the situation, and was insurance against the possibility that Blue would pull back from a full-scale amphibious island assault. Green saw the carrier as one of Red's "crown jewels," and hoped to manufacture a "Prince of Wales moment," to give the JSDF "a feather in its cap." Illustratively, a Blue player asked, "What made you think the loss of one of two Chinese carriers would lead to China throwing up its hands? Especially when, for the United States, just 1 of 11 would mean absolute war?" The participant replied, "Well, that puts the finger on the difference between Blue and Green. For Japan, they've already lost."

BLUE: AMERICAN CREDIBILITY & TRIPWIRES

Blue emphasized that its first priority in Move Three was not to seek an off-ramp but to preserve both Green's political leadership and Blue's preeminence in the Pacific. Given substantial and rising Green casualties, particularly on Blue assessed that it could no longer reasonably abstain from fully embracing Article V obligations without sacrificing its guarantee of extended deterrence. Blue might then suffer abandonment by allies, loss of international military prestige, and a growing inability to deter other potential adversaries elsewhere in the world.

Given the dual-use status of airport, and its frequent use by American servicemen and their families, Blue assessed that there would likely have been American casualties from Red's strikes. As such, Blue assessed that its tripwire had been activated; it was thus obligated to strike Red assets in retaliation.

RED: PARTY LEGITIMACY COSTS

Red noted that it would have been extremely difficult for the Party to back down, due to heavy perceived legitimacy costs associated with reclaiming a historically disputed piece of territory only to cede it yet again. Red propaganda used to incite the public against Green property and Green nationals would have focused on unforgivable historical atrocities and on the value to national pride of the islands themselves; in the mind of Red, it was difficult to conceive of a scenario where China agreed to withdraw from and and the statement of the scenario where China agreed to withdraw from the scenario where th

Would there, however, have been any set of tools available to the alliance that would have allowed Red to save face in a compromise solution? Since China in theory would be more concerned with establishing a precedent for her claim to the islands than with physically keeping forces present, some thought that evidence of the alliance's overwhelming power, additional targeted alliance threats, and a face-saving compromise to acknowledge the dispute and agree to future talks might have been a way to avoid further escalation. For example, if there had been some combination of an alliance success in retaking (b) (6) a credible nuclear threat issued by Blue, an agreement on future secret Sino-Japanese talks, and a peaceful release of all the civilians under Red control, one participant assessed that both Red powers and a Green Prime Minister might have accepted a compromise deal. This would especially be the case if it was publicly known that the civilians would "rather be red than dead." Another participant, however, responded by citing the 1969 Sino-Soviet conflict over Zhenbao Island, noting that the Chinese seemed to possess risk tolerance for war even with a nuclear superpower.

NET IMPACT

All parties agreed that the net impact of the crisis would have been massive and world-altering. Economically speaking, the cessation of commerce with Japan would send shockwaves throughout the world economy, especially if the United States followed up with its own sanctions on China. Given continued military escalation, and the entry of the bulk of American amphibious power from San Diego, one participant assessed that "what we're having then is World War III... The islands become a sideshow."

Finally, one participant noted that this was his fourth wargame exploring similar conflict dynamics, and in each case no off-ramps had been discovered, despite each side's best efforts. In his words, "In Washington you have an idea about a King's War – squabble a bit, trade kingdoms, and shake hands. It doesn't work that way. The more I see it, the more it ends badly, the more it goes wider." Or, as another participant glumly concluded at the end of the discussion of off-ramps, "I think it would be war. There's nothing [to stop it]."

CONCLUSION

This simulation explored a near-future amphibious warfare scenario around the southern **states** islands of **states** and **states** Ultimately, escalatory dynamics led to a state of all-out war at the end of the third move, with a limited Blue strike on the Red mainland and unrestricted Red strikes on all visible Green and Blue assets. The nuclear taboo, however, had not yet been breached. Findings of note included:

- Rapid Red Move One movements saddled Blue and Green with the dilemma of having to strike to preclude a prohibitive level of Red entrenchment on the islands while lacking the initial coordination and force concentrations to do so with desired levels of confidence.
- Misperceived signals contributed to crisis escalation, with Red strikes on serving as a trigger for Blue to cross Red's own "red line" of strikes on the mainland.
- Nuclear signaling produced interesting effects in the simulation. During Move One, after Red deployed a number of DF-31 ICBMs out of garrison and into hiding positions, Blue was notified by intelligence assets that Red DF-31s were leaving garrison. Blue interpreted this to indicate that Red was purposely signaling its resolve in the conflict, while Red, in fact, had moved the DF-31s out of garrison in order to keep them safe. Blue responded by pushing off ballistic missile submarines from port. Red's only public display was a test of a nuclear-capable IRBM that would only be able to range Japan – making it less threatening to US interests. In the next move, Red deployed ballistic missile submarines to the Bohai Sea, intending for this to be seen by Blue as a signal of its resolve. Blue, however, did not receive intelligence about these submarine movements, and therefore missed a potentially important Red cue.
- There were no off-ramps visible to the teams in this game. Red was unwilling to withdraw from the disputed islands even in the event of a full alliance blockade and likely starvation of Red forces. That said, during the hotwash discussion, some participants argued that a compromise might have been reached if the alliance had exhibited overwhelming military superiority, made additional targeted threats, and been willing to offer Red an acknowledgement of the territorial dispute in exchange for a Red withdrawal from the islands.

Suggested future directions for study include:

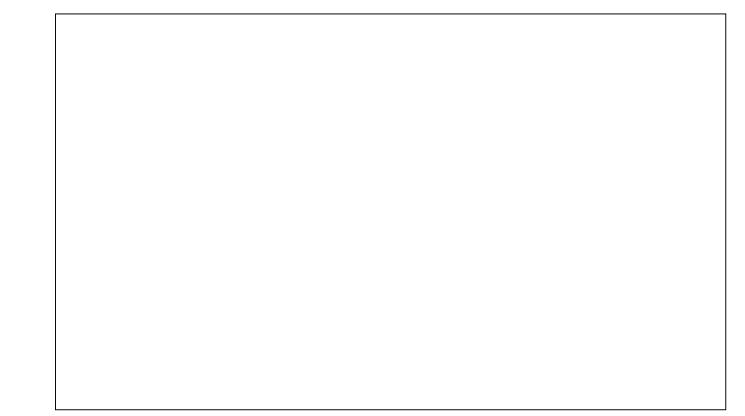
- Operational tempo-retarding alliance dynamics substantially disadvantaged the Blue-Green response to this Red "crisis of choice." Could greater institutionalized coordination, enhanced military-to-military contacts, and/or planned force structure integration help accelerate decision making within the alliance in times of stress?
- Looking past the outcome of the simulation itself, what would Red management of a nowhostile Blue and Green be in the medium term? Given the possibility of other forms of

aggression also leading to the political end-state of the present simulation, study of Chinese regional management strategies after-the-fact might also be of substantial value.

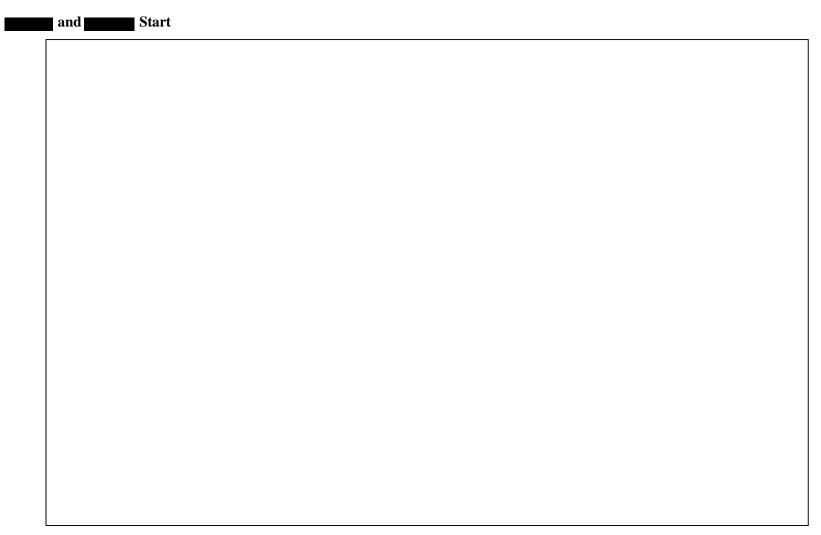
APPENDIX

MOVE-BY-MOVE MAPS

Asia Start



While Red forces concentrated around and and a Blue's starting posture saw it with strong positions on and Guam, and a carrier strike group with amphibious assault support operating midway between Guam and the Japanese mainland.



Having overrun Green garrisons, Red managed to build up 5,000 military personnel on each island – made up of SOF and marines. Heavy forces were transported by four Type 071 amphibious transport docks that were escorted by destroyers. These included SAM and AShM batteries.

Southern Area of Operations Start

While Red had seized control of and and Green and Blue still maintained significant forces to the north at



Middle of Move One

Green submarines move into blockade positions while a Blue submarine delivers Green SOF onto the occupied islands.

End of Move One

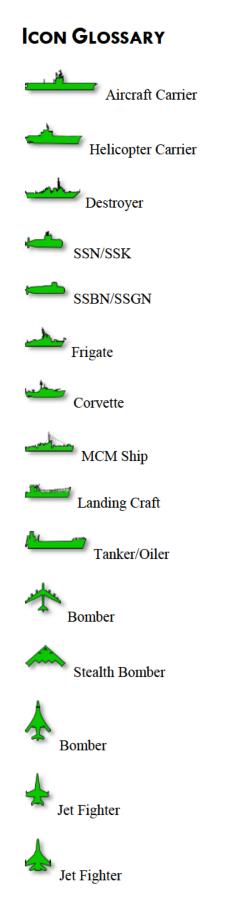
After Red fires on Green's Coast Guard vessels, a skirmish results in the loss of a Green SAG and a Red missile boat squadron. In addition, Green submarines scored hits on Red amphibious transport docks, and Blue moved nuclear submarines into blockade positions.

End of Move Two

Massive bombardment by Blue and Red leads to the sinking of numerous Red ships surrounding the islands and the destruction of most of Red's established SAM batteries.

Asia End

In the larger theater, Red pushed submarines out toward the second island chain, while Blue continued to hold its carrier strike group in reserve. Red also consolidated its position in the South China Sea, thwarting an attempt by Blue to retake



Stealth Jet Fighter MP/ASW Aircraft UAV (recon) UAV (armed) Transport

AEW&C

Aerial Tanker

Heli (transport)

Heli (attack)

Heli (tandem rotor)



Airborne (infantry)





Armor Mechanized Infantry Mechanized Infantry Motorized Infantry Artillery (howitzer) Artillery (SPG) Artillery (MRL) Infantry Special Forces SAM SAM or BMD SAM or BMD Ballistic Missile Mobile Radar/Comms ver-the-horizon Radar

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Agenda

Amphibious Operations in East Asia 15 July 2014		
Agenda		
830	Introduction and Opening Scenario	
930	Move One	
1130	Adjudication	
1215	Move Two	
1400	Adjudication	
1445	Move Three	
1600	Hot Wash	
1630	Concluding Thoughts	
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PARTICIPANT LIST

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