

Scenario 1 – Disputed Territory and Resources

Orange, Blue, and Red have a longstanding dispute over an island chain that may contain natural resources. The island chain is within 1,000 nautical miles of all three countries. Yellow has attempted to act as a mediator to reduce tensions and avoid outright conflict in the region.

On November 1, the Standard Oil Company, a firm that is owned by the Orange government and enjoys substantial financial investment from Yellow companies, announces that it has found massive reserves of oil near Skull Island, which is part of the disputed island chain. Claiming that it has a drilling license from Orange, Standard Oil announces that it has moved offshore drilling equipment to the area to begin extracting oil.

On November 2, Blue and Red publicly protest the move and announce that they cannot allow such an illegal action to occur. Both countries move naval units into the territorial waters around the island chain for the stated purpose of monitoring the activity of Standard Oil and protecting their own claims. Orange announces that in order to protect its commercial activities, it is moving its own naval units into the territorial waters of the island chain.

On November 4, Orange lands a small military force on Skull Island and establishes a satellite ground station. Blue and Red denounce this action as a violation of international law and demand that Orange withdraw immediately. Yellow calls an emergency meeting of the United Nations Security Council (UNSC) to discuss the situation.

On November 6, a Yellow carrier strike group arrives near the island chain but stays beyond the territorial sea, where it conducts air patrols as well as ISR operations using manned and unmanned aircraft. Yellow publicly calls on all parties to refrain from hostile activities. The media reports that commercial shipping in the area is experiencing interference with civil PNT navigation systems.

On November 7, a Blue manned helicopter flying an ISR mission from a destroyer near Skull Island is struck by a small UAV and crashes, killing the pilot. Blue claims that the helicopter was deliberately rammed by an Orange UAV. Blue begins to mobilize additional military units, which includes dispatching naval ships to and establishing long-range ISR patrols over the island chain. Blue also puts land-based aircraft and conventional ballistic missile forces on alert. Blue declares publicly that it will defend itself against any further attacks on its military forces. Blue reiterates its demands that Orange cease the drilling operations and remove its forces from Skull Island, threatening to force an end to the drilling operations if Orange does not comply.

On November 8, Orange protests its innocence in the helicopter crash, claiming that a Red UAV hit the Blue aircraft. However, Orange also begins to mobilize additional naval and air units while declaring that it will defend itself against any aggression. Orange deploys two destroyers to the island chain, which are equipped with midcourse missile defenses that utilize satellites for detection and targeting of ballistic missiles.

On November 9, Red protestors stage mass demonstrations in the streets, calling for Orange to withdraw from Skull Island and for the Red government to do more to protect its national interests. The same day, the UNSC convenes an emergency meeting.

Yellow Team - Scenario 1

OBJECTIVE

Yellow's primary objective is to maintain stability in the region and prevent the outbreak of armed conflict that could jeopardize trade. At the same time, Yellow's government is also keen to uphold its alliance with Orange, while protecting its power projection capabilities, particularly its space-based systems.

PRIVATE INFORMATION

Orange did not consult with Yellow before moving its forces onto Skull Island.

After landing on Skull Island, Orange's forces established a ground-based PNT and satellite communications jamming capability. Orange then began jamming all civil PNT signals in a 200-kilometer radius around Skull Island. Orange's forces in the area are largely unaffected by this jamming as they are utilizing an encrypted military PNT signal provided by Yellow.

Blue's downed helicopter probably collided with a Red UAV because Red's UAVs rely solely on civil PNT signals.

Orange's ship-based midcourse missile defense relies on Yellow missile warning satellites.

Blue's alerting of its land-based missile forces included raising its conventional anti-ship ballistic missiles to their highest alert status. There are also indications that Blue has upped the tasking on its five ISR satellites that are capable of detecting, tracking, and targeting ships at sea.

There are indications that hardline elements within the Blue military are fueling domestic protests and are pushing for forceful action.

Blue Team - Scenario 1

OBJECTIVE

The Blue government's primary objectives are to force Orange to withdraw their forces from Skull Island and for Standard Oil to cease operations. Blue's secondary objective is to undermine Orange and Yellow's ability to use space capabilities to project power into the island chain.

PRIVATE INFORMATION

The Red UAV likely crashed due to Orange jamming of all public PNT signals near Skull Island. The jamming is not likely to affect the military PNT signals used by Blue, Yellow, or Orange.

Orange's ship-based missile defense system utilizes two of Yellow's space-based missile warning satellites in geosynchronous orbit for detecting missile launches. Orange shares military PNT capabilities with Yellow, using its own satellites to augment Yellow's constellation. Orange has its own limited space-based ISR capability, consisting of six satellites providing both optical and SAR imagery, and it has limited access to some of Yellow's space-based ISR capabilities.

Yellow's carrier battle group is highly reliant on space capabilities (SATCOM in particular) to operate in the vicinity of the island chain.

Orange Team - Scenario 1

OBJECTIVE

Orange places the highest priority on defending its claims to Skull Island and the nearby oil fields, as well as deterring aggression by Blue.

PRIVATE INFORMATION

Orange did not consult with Yellow before moving its forces onto Skull Island.

Upon landing on Skull Island, Orange forces established a ground-based PNT and satellite communications jamming capability. As per standard operation procedure, Orange began jamming all civil PNT signals in a 200-kilometer radius around Skull Island. Orange forces in the area are largely unaffected by the jamming, as they are utilizing an encrypted military PNT signal provided by Yellow.

Orange intelligence services say it is likely that a Red UAV collided with the Blue helicopter near Skull Island, potentially due to Orange jamming.

Blue's alerting of its land-based missile forces included raising its conventional anti-ship ballistic missiles to their highest possible alert status. There are also indications that Blue has upped the tasking on its five ISR satellites capable of detecting, tracking, and targeting ships at sea.

There are indications that hardline elements within the Blue military are fueling domestic protests and pushing for forceful action.

Red Team - Scenario 1

OBJECTIVE

Red desires to avoid any perceived change in the sovereignty of the disputed islands. In addition, Red places a high priority on obtaining evidence that Orange is causing environmental damage and violating international law so that it can use the evidence to put international political and public pressure on Orange.

PRIVATE INFORMATION

On November 7, Red lost contact with one of its UAVs flying an ISR mission near Skull Island. Red technical experts say it might have been due to PNT jamming and that the most likely source is the Orange facility on Skull Island.

Since all Red UAVs rely heavily on civil PNT signals for navigation, it is unlikely Red will be able to successfully operate UAVs in the area.

Scenario 1 Summary

Inbrief

Orange, Blue, and Red have a long-standing dispute over an island chain that may contain natural resources. The island chain is within 1,000 nautical miles of all three countries. Yellow has attempted to act as a mediator to reduce tensions and avoid outright conflict in the region.

The crisis begins with the Standard Oil Company, a firm owned by the Orange government, with substantial financial investment from Yellow companies, moving into the island chain to begin oil drilling operations (without prior consultation with its ally, Yellow). Blue and Red publicly denounce the action, and move naval and air forces into the island chain. Orange moves its own naval forces into the region to protect the commercial operations, and establishes a military base on Skull Island to provide additional support. The military base on Skull Island includes a military-grade PNT downlink jammer, which disrupts civil PNT signals in a 200-km radius around the island (but not the military PNT signals). During the crisis, a Blue helicopter is struck by a UAV. The UAV was owned by Red, and the PNT downlink jamming disrupted its ability to navigate (although only the Red Team knows this at the beginning of the scenario).

Yellow's primary objective in the scenario is to maintain stability in the region, and prevent the outbreak of armed conflict that could jeopardize trade. At the same time, Yellow is to uphold its alliance with Orange, and protect its space capabilities that enable long-distance power projection.

Blue's primary objective is to force Orange to withdraw their forces from Skull Island, and to cease drilling operations. Blue's secondary objective is to undermine Orange and Yellow's ability to use space capabilities to project power into the island chain.

Orange's primary objective is to defend its claims on Skull Island and the nearby drilling operation, while deterring aggression by Blue.

Red's primary objective is to avoid any perceived change in the sovereignty of the island chain, and obtaining evidence that Orange is causing environmental damage and violating international law in order to put international political and public pressure on Orange to withdraw.

Move 1

Blue's goal in Move 1 was to pressure and isolate Orange while sidelining Yellow, by changing the psychology of Orange. Blue decided to deploy additional air and naval forces to the region, and also begin downlink jamming of the Yellow commercial SATCOM used by Standard Oil for their drilling operations. The Control team adjudicated this as successful, but with attribution to Blue.

Blue sent a private message to Red, offering to coordinate a diplomatic and military response to Yellow, and asked if Red was willing to undertake peaceful, reversible cyber operations against

Standard Oil's global networks. Blue sent a private message to Yellow to remind Yellow of its economic investments in Standard Oil, and ask if that is in line with their public remarks. Publicly, Blue demarched Orange, and accused Orange of creating the PNT interference that caused the collision. Blue also publicly endorsed Yellow's call for restraint, while emphasizing Orange's illegal actions, and offered to host 3+1 talks (with Yellow as the observer) on regional challenges.

Red's goal in Move 1 was to avoid escalating the situation. Red began the scenario by increasing the tasking of its commercial ISR satellites for the island chain, in order to obtain evidence of potential environmental damage. Red also tasked their commercial fishing fleet to collect water samples, and placed government scientists on the commercial fishing vessels to aid in the collection and analysis, in order to try and learn more about the situation and reassert its sovereignty while avoiding provoking Orange.

Red sent a private message to Blue, indicating that Red believed its UAV may have been the source of the crash, and expressing interest in an investigation into potential PNT downlink jamming by Orange. Red also sent a private message to Yellow, expressing grave concern about the situation and Orange's attempt to change the status quo by force. Red released a public message to its population that it was actively working with the United Nations Security Council to condemn Orange's actions, and it was using its military forces to limit escalation and protect economic activity in the region. The goal of these messages was to build confidence with Blue and Yellow.

Yellow's goal in Move 1 was to de-escalate the situation, and establish communications with all actors to identify credible voices and decision-makers. Yellow began by privately increasing the alert status of its satellite dazzler and offensive cyber capabilities, in case they needed to be used in the future.

Yellow sent a private message to Orange expressing its displeasure with the lack of prior consultation before deploying military forces to Skull Island, and requesting consultation on any further Orange military deployments in the area. Yellow also stated that it was investigating the source of the PNT interference. Yellow also sent a private message to Red, indicating Yellow's interest in preserving safety of life and trade in the region, believed that it may have been Red's UAV that was involved in the collision, and asked if Red can help Yellow communicate with Blue to de-escalate tensions. Yellow also sent a private message to Blue, asking if Blue was open to sharing ISR data as a confidence-building measure. Publicly, Yellow released a statement indicating its support for freedom of navigation and trade in the region, and characterizing the situation as a trade dispute, not a territorial one.

Orange's goal in Move 1 was to diffuse the crisis while maintaining their military presence, and also to try and use Yellow to offset a potential military response from Red. Orange decided to continue the PNT downlink jamming, and also position its naval forces and sea-based missile defenses to defend Skull Island.

Orange sent a private message to Yellow, reminding Yellow of their treaty commitments, and expressing concern about potential threatening action by Blue. Orange also asked Yellow to open

diplomatic negotiations between all the parties, while also increasing Yellow's naval defensive presence in the island chain. Orange sent a private message to Red offering to potentially share in the region's economic benefits, and wishing that Red remained neutral in the matter. Publicly, Orange expressed regret over the loss of life, and offered compensation to Blue while calling for restraint by all parties.

Move 2

Blue's goal in Move 2 was to ratchet up the pressure on Orange, without being the first to engage in an illegal use of force. Blue made a request to Red to engage in joint military exercises on the Blue/Red border, which Red did not respond to. Blue conducted a cyber attack on the Orange ground station on Skull Island, which the Control Cell adjudicated as a failed attack that was not attributed back to Blue. Blue also continued the cyber attacks against Standard Oil's global network, and implemented economic sanctions against Orange in concert with Red.

Blue sent Yellow a private message, indicating that it was open to ISR sharing. Publicly, Blue presented at a meeting of the UNSC satellite imagery of Orange's military activity on Skull Island, and demanded that Yellow call on Orange to remove its forces from Skull Island.

Red's goal in Move 2 was to slow Blue down, while bringing in Yellow to pull Orange back from the island chain. The Red Team discussed how aggressively to deal with Orange, but were in agreement that they did not want to get into a fight with Blue. Red publicly released imagery of Orange's deployment of ships near Skull Island with missile defenses.

Red sent a message to Yellow indicated a shared concern for preserving life and trade, and avoiding escalation. Red confirmed that its analysis showed Orange as the source of the PNT downlink jamming, that Orange was also damaging the local environment surrounding Skull Island, and that Red would be happy to facilitate some sort of dialogue with Blue. Red sent a private message to Blue, indicating that Yellow had approached Red with an offer to facilitate a diplomatic solution, a move that Red supported, but also requesting the purpose of the military exercise on the border. Red sent a private message to Orange indicating a shared desire to resolve the situation diplomatically, but noting that Orange's actions had violated international law. Publicly, Red expressed concern about Orange's further militarization of the islands, continued its call for a peaceful resolution, but also asserted its right to self defense if its interests were threatened.

Yellow's goal in Move 2 was to reinforce de-escalation, and return to a stable environment. Yellow publicly released satellite imagery of Skull Island and the island chain, in the hope of providing common awareness of the situation.

Yellow sent a private message to Blue stating that it was prepared to attribute the commercial SATCOM downlink jamming to Blue, and that Yellow would defend itself against any intentional degradation of Yellow's satellite capabilities; Yellow also pointed out that its preference was de-escalation in order to avoid future loss of life. Yellow sent a private communication to Orange reminding Orange that Yellow controlled the missile warning information, and suggesting that Standard Oil purchase commercial SATCOM from Red or Blue.

Yellow sent a private message to Red to request Red delay moving its commercial fishing vessels into the region in order to allow Yellow to place its Coast Guard personnel and military PNT receivers on the vessels. Publicly, Yellow offered to provide Coast Guard personnel and military PNT receivers on Red fishing vessels to ensure safety of life.

Orange's goal in Move 2 was de-escalate the situation without compromising their presence on Skull Island. Orange believed that Blue made a mistake in stating this was a commercial situation, and planned to use that to de-escalate.

Orange sent a private message to Yellow, calling on Yellow as its alliance partner to mediate the dispute as a commercial matter with Blue and Red. Orange sent a private message to Red, offering to make Red a full economic partner in sharing resources in the region. Publicly, Orange agreed with Blue's characterization of the situation as a commercial dispute, and agreed to 3+1 talks if Yellow acted as the mediator. Orange also expressed interest in discussing a code of conduct on electromagnetic interference. Orange also leaked disinformation to the media that the initial samples from the drilling indicated a disappointing level of oil.

Move 3

Red's goal in Move 3 was to get the other team's to acknowledge its sovereign and commercial rights, as they felt the other teams ignored them more as the scenario moved along. Red was also still looking for a way to get Orange off Skull Island. Red decided to raise the alert status of their forces in the region, and also to conduct an offensive cyber operation against the Orange military ground station on Skull Island, which they determined was the likely source of the PNT jamming. The Control Team adjudicated the attack as being successful, and without any attribution.

Red sent a private message to Yellow, stating that Red had been getting significant pressure from Blue to join in economic sanctions against Orange, engage in military exercises, and coordinate actions. Red stated that their preference was a peaceful reversion to the status quo ante, but they were being pushed into a situation where they might have to take a more active posture unless Yellow could get Orange to withdraw. Red privately asked Blue about the purpose of Blue's military exercises on its border with Red. Red sent a private message to Orange, reasserting Red's sovereignty and freedom of access of its commercial fleets. Publicly, Red supported Orange's call for removal of military forces, but disagreed with the characterization of this as an economic crisis. Red encouraged its commercial industry to increase their activity in the island chain, and reaffirmed the protection from Red's military. Red publicly called on all parties to engage in diplomatic discussions in Red's capital.

Yellow's goal for Move 3 was to reinforce the actions of the other teams to de-escalate tensions. Yellow kept its satellite dazzler and cyber forces at a high readiness level, and pulled Yellow maritime forces out of the region in order to de-escalate the situation.

Yellow sent a private message to Orange asking to include Red as a stakeholder in Standard Oil, and also potentially bring Red under the mutual defense umbrella. Yellow sent a private message to Red to encourage them to approach Standard Oil about joining in the venture. Publicly,

Yellow offered to send Yellow personnel if the UN wanted to observe the Red-Blue military exercise, and volunteered to mediate the resolution of what it continued to describe as a trade issue.

Orange's goal for Move 3 was to maintain its presence on Skull Island, make Blue out to be the aggressor, and to emphasize the commercial nature of the operation. Orange did not take any actions in Move 3. Orange sent a private message to Yellow, indicating that it was disappointed with Yellow's unwillingness to follow through on their mutual defense commitments.

Publicly, Orange expressed disappointment with Blue's unprovoked cyber attacks on the "peaceful, commercial installation" on Skull Island, and characterized them as a violation of international law. Orange reiterated Standard Oil's rights to engage in commercial activity, and that the military presence on the island was limited to "guards." Orange also reiterated their acceptance of Blue's offer for international negotiations, mediated by Yellow.

Blue's goal for Move 3 was to achieve their objective of removing Orange forces from Skull Island. Blue commenced downlink jamming of the Yellow/Orange commercial and military SATCOM being used by the Orange forces on Skull Island, and dazzling of Yellow/Orange ISR satellites as they flew over Skull Island; this last move was intended to cover only the short period of time needed for Blue to conduct an air assault on the Orange forces on Skull Island. The Control Team adjudicated the the jamming and dazzling as both being successful and attributed to Blue, and a successful attack.

Blue privately told Yellow that any interference with Yellow SATCOM was unintentional. Publicly, Blue endorsed Orange's call for all parties to remove their forces from the region, and called for Orange to remove their military forces from Skull Island as a first step towards a return to the status quo ante.

Conclusion

In the post-scenario discussion, the Red Team stated that their goal was to return the situation to the status quo ante, but felt that they were being ignored by the other teams, and thus debated how early to launch the cyber attack. The Red Team also stated that they fundamentally saw this as a territorial dispute, while both Yellow and Orange wanted to keep it an economic dispute.

The Blue Team stated that they wanted to find a way to get Orange off of Skull Island, without provoking a military response from Yellow. That drove Blue to look for ways to control escalation while still being coercive. As part of this, the Blue Team felt that Standard Oil could be treated as an independent actor from the Orange government. The Blue Team stated that they were hesitant to go directly to attacks on space capabilities, because they felt that once the conflict moved to space it would be hard to stop it from ratcheting up.

The Orange Team stated that they resorted to lawfare, disinformation, and diplomacy to offset their weak military position. Thus, the Orange Team focused on being conciliatory, and offering economic incentives to Red and Blue, such as sharing in the commercial profits. The Orange

Team said that they were surprised by Blue's decision to escalate to armed attack at the end, and felt that up until then Orange was winning with diplomacy.

The Yellow Team felt that Orange's decision to land forces in the island chain without prior consultation undermined their alliance, and thus were not incentivized to strongly back Orange. Yellow's overall strategy was to de-escalate, communicate, find credible stakeholders, frame the scenario, and take initiative in the international fora. As part of this, the Yellow Team stated that they tried to use their space capabilities to increase transparency, and hopefully peel Red away from Blue while deterring armed attacks. The Yellow Team stated that if there had been a Move 4, they probably would have responded to Blue's jamming and dazzling in kind, but probably also with a communication to Blue to try and resolve the situation. The Yellow Team also stated that they probably would have considered the jamming and dazzling to be equivalent to a permanent attack, because it could come at any time and they thus could not rely on those space capabilities.