Integration of Information in Joint Operations Project

Assessments of Operations in the Information Environment for the
Eastern Mediterranean and South China Sea

FINAL REPORT

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For the
STRATEGIC MULTILAYER ASSESSMENT
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The overall classification of this document is UNCLASSIFIED

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Executive Summary

At the request of the U.S. Air Force (USAF) A3 (Operations), Lt Gen Mark Kelly, Deputy Chief of Staff, Operations, the Joint Staff J-39 Strategic Multilayer Assessment (SMA) conducted a study to address how joint force and service component commanders, and their respective staffs, can best understand and integrate information and influence into operational-level planning, execution, and assessment activities across the continuum of competition to conflict.

In support of the USAF and the SMA, the TRADOC G-2 Modeling and Simulations Office (M&SO) employed the Athena Simulation to assess a series of research questions posed by the Air Force, as well as to test a series of explorable insights (hypotheses) developed during the project's Net Assessment and Subject Matter Expert (SME) engagements. A total of 35 explorable insights were identified during the Net Assessment from which four specific study topics were derived for analysis utilizing the Athena Simulation. These included:

Study Topic #1. Messaging Integrity. Assess how populations are influenced by messaging and actions that reflect U.S. values.

Study Topic #2. Perceived Domestic Stability. Assess how incidents of domestic instability and civil disorder undermine Chinese and/or Russian ability to contest U.S. influence in international spaces.

Study Topic #3. Use of Proxies. Assess how the effectiveness of U.S. messaging is impacted when it is communicated through third parties or proxies.

Study Topic #4. Relevancy of Messaging. Assess how the effectiveness of messaging is impacted when it is oriented on issues of significance to the local noncombatant populations.

This Final Study Report compiles the results and insights derived by the Athena team from research, SME engagements, Athena Simulation runs, and the collaborative analysis conducted with other members of the SMA community of interest and provides a series of conclusions addressing the overarching SMA project objectives and questions.

The Athena Simulation is a sociocultural modeling capability that provides decision makers an improved understanding of the intended and unintended consequences, the second and third order effects, of their engagement options (police/military force activities, economic engagements, information operations, etc.) upon noncombatant populations when viewed across the entirety of the Operational Environment.

Two separate instantiations of the Athena Simulation were used to model information operations (IO) and competitive messaging dynamics to assess potential regional stability effects.

> The first scenario was primarily centered in the South China Sea and focused on the Philippines with China as the major international actor. The modeling design explored the circumstances surrounding the ongoing conflict involving the maintenance and improvement, by the Philippines, of a small outpost established by them on the Second Thomas Shoal.

> The second scenario was primarily centered in the Eastern Mediterranean and focused on the counties of Turkey, Greece and Cyprus, with Russia as a major actor. Turkey and Greece have a long history of tense relations and this modeling design explored the circumstances surrounding the ongoing disagreements over territorial boundaries, sovereignty of several islets, the establishment of exclusive economic zones, and the unresolved dispute over Cyprus.

To inform the study objectives and provide an improved understanding of the underlying political, economic and sociocultural dynamics at work in each of these studies, multiple use cases were employed for each scenario to provide a range of possible futures. These use cases defined conditions leading to modeling outcomes that enabled a comparative analysis of Athena results to be conducted.

South China Sea

> Base Case. In the Base Case, U.S. messaging will be oriented on maintaining the relationship between the U.S. and the Philippines as a means of mitigating Chinese influence, particularly with President Duterte.

> Use Case #1 (U.S. Support with Acknowledgement). This use case explores the impact of the U.S. using messaging not well supported by active measures to assist the Philippines and counter Chinese actions. The U.S. openly acknowledges its own domestic instability issues, indicating a desire to address the problem at the highest level of national leadership.

> Use Case #2 (U.S. Support with No Acknowledgement). This use case explores the impact of the U.S. using both messaging and active measures to indicate their support to the Philippines. The U.S. however, does not address its own issues of domestic instability, indicating only a limited concern for these at the highest level of national leadership.

Eastern Mediterranean

Use Case #1 (Base Case). In the Base Case, Russian messaging will be oriented on transforming Cyprus into a Russia-friendly country in order to posture Cyprus to lobby the European Union (EU) and to serve as a communications channel for advocating Russian narratives. This use case will then assess the effects of delay, completeness and relevance, with and without accompanying U.S. actions to determine the effectiveness of key actor messaging.

Use Case #2 (Value-Based Messaging). In this use case, the same set of messaging utilized in the base case will be compared with messaging that is inconsistent with U.S. values.

Use Case #3 (Perceived Domestic Stability). In this use case, the same set of messaging utilized in the base case will be compared with Russian messaging that is undermined by Russian domestic instability.

Use Case #4 (Relevance of Messaging). In this use case, the same set of messaging utilized in the base case will be compared with U.S. messaging that is oriented on issues that are generally insignificant to local noncombatant populations.

Use Case #5 (Combined Effects). This use case combines the optimal solutions identified for all previous use cases thereby integrating value-based, relevant messaging with the perception of Russian domestic stability.

A combination of research, SME engagements, and Athena Simulation modeling and analysis produced the following insights:

South China Sea Insights

Insight #1. The U.S. enjoys greater support than the Chinese Communist Party in the Philippines regardless of how the U.S. is approaching competition or conflict in the South China Sea.

Insight #2. Support for the U.S. in the Philippines is resilient.

Insight #3. When the U.S. Government is willing to openly discuss its domestic civil unrest, Filipino support for the U.S. increases.

Insight #4. Tangible actions demonstrating allied and partner nation support greatly increases Filipino support for the U.S.

Insight #5. The U.S. use of friendly Philippine politicians as proxies for criticizing the Chinese Communist Party is mildly effective at increasing local popular support for the Government of the Republic of the Philippines.

Insight #6. The Chinese Communist Party's use of relevant messaging to encourage foreign investment/development and Filipinos of Chinese descent as proxies for anti-U.S. communications was highly effective at reducing local support for the U.S.

Eastern Mediterranean Insights

Insight #1. Bureaucratic delays in U.S. and EU messaging responsiveness allow the Russians to gain an advantage in the broader information environment.

Insight #2. Preemptive U.S. and EU messaging proved ineffective when seeking to address Russian messaging tactics; however, when the U.S. and EU used immediate counter-messaging, they realized significantly better success.

Insight #3. Even with immediate U.S. counter-messaging, influence can be lost by allowing Russia to frame issues in the media first.

Insight #4. Despite messaging tactics employed, local civilian populations are most likely to align with and support the regional actors with whom they have the most commonality of beliefs.

Conclusions

Overarching Conclusion. Support for the U.S. and its allies and partners in the South China Sea and Eastern Mediterranean regions relies on messaging relevance, timeliness, honesty, and the demonstration of appropriate actions to accompany its messaging campaign.

Conclusions for each of the four primary study topics are also provided.

Study Topic #1. Messaging Integrity. Assess how populations are influenced by messaging and actions that reflect U.S. values.

Civilian populations respond favorably to integrity and consistency in messaging accompanied by actions that align with U.S. values and character. When the U.S. uses positive, values-based messaging it is generally more effective and persuasive.

Study Topic #2. Perceived Domestic Stability. Assess how incidents of domestic instability and civil disorder undermine Chinese and/or Russian ability to contest U.S. influence in international spaces.

Civilian populations lose trust and confidence in the great powers (U.S., China, Russia) when those governments are unwilling to admit their domestic weaknesses or social instabilities. The perception of instability and disorder affects the great powers' level of strategic influence within the international community at least as much as their active messaging campaigns.

Study Topic #3. Use of Proxies. Assess how the effectiveness of U.S. messaging is impacted when it is communicated through third parties or proxies.

The use of proxies to present a message is generally ineffective unless the proxy is well regarded by the target population. Proxies that are well accepted and integrated within the local population have less of a requirement to accompany their words with actions. Messaging by the great powers, when passed by a proxy whose messaging style and relationship to the target population are accepted, can have a positive impact on that power's regional influence objectives.

Study Topic #4. Relevancy of Messaging. Assess how the effectiveness of messaging is impacted when it is oriented on issues of significance to the local noncombatant populations.

Messaging that is generally irrelevant to local civilian populations does not resonate as well as that which addresses issues of significance. Relevant messaging builds trust and creates a desire in the audience to return for increasingly more information, meaning that messaging of this nature is significantly more likely to obtain the sender's desired reaction, action, and response from the target audience.

Chapter 1: Project Overview and Study Approach

Introduction. The Joint Staff J-39 Strategic Multilayer Assessment provides decision and planning support to combatant and joint force commanders facing complex operational and technical imperatives that require collaborative, multi-agency, multi-disciplinary, mixed-method approaches. The SMA is focused on expanding strategic horizons and informing choices that lead to more effective strategy formulation. SMA provides a diversity of thought and opinion by drawing on subject matter expertise from leading academics and practitioners from the public and private sectors globally. SMA activities are accepted and prioritized by the Joint Staff J-39 Deputy Director of Global Operations and is resourced by the Office of the Under Secretary of Defense (Research and Development) and the Rapid Reaction Technology Office.

At the request of the U.S. Air Force (USAF) A3 (Operations), Lt Gen Mark Kelly, Deputy Chief of Staff, Operations, the SMA was asked to initiate a study[1] to address how joint force and service component commanders, and their respective staffs can best understand and integrate information and influence into operational-level planning, execution, and assessment activities across the continuum of competition to conflict.
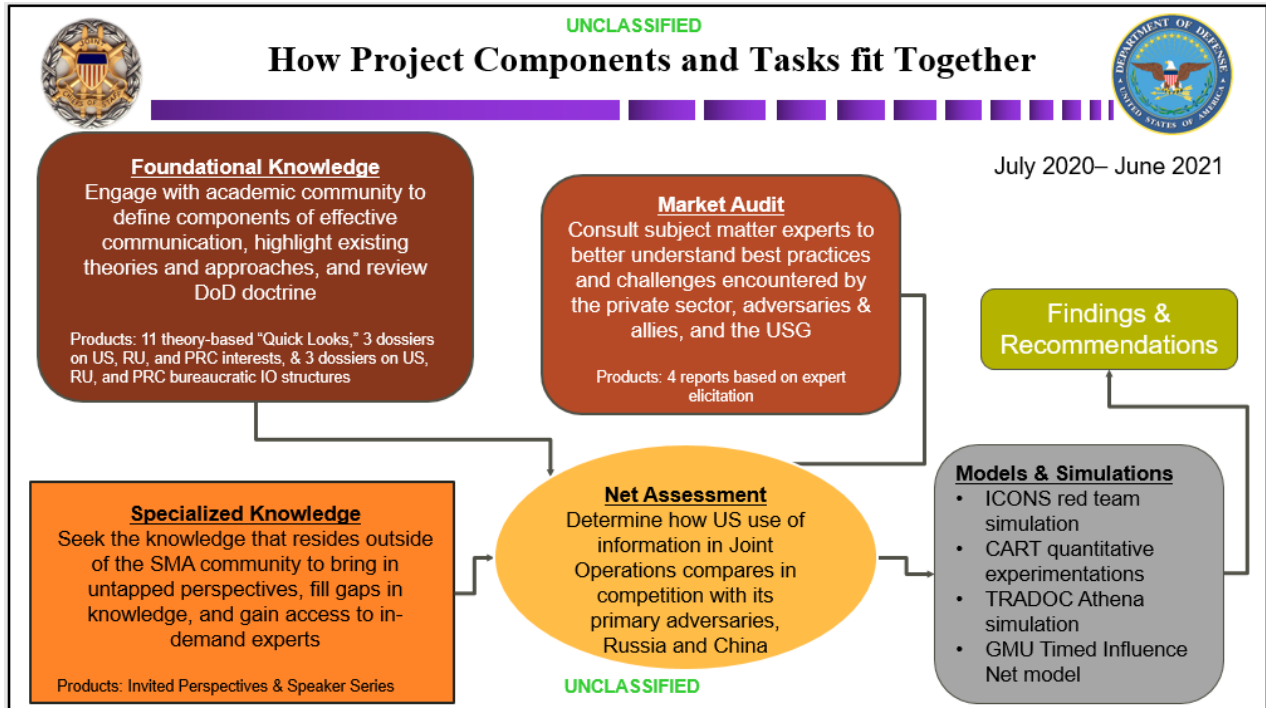
Figure #1. Integration of Information in Joint Operations (IIJO) Project Design

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[1] This study addresses relevant aspects of JROCM 068-19, "Operations in the Information Environment DOTMLPF-P Change Recommendation (DCR)."

IIJO Project - Mission Statement. Assess the ways in which the joint force can most effectively integrate information and influence into its activities across the continuum of competition-conflict.

IIJO Project - Purpose Statement. The U.S. is facing a global transition to an Information Age where the centrality and velocity of information and enabling digital technologies define the age and have emerged as a new global commons. An increasingly complex and growing network of human connections has accelerated the creation of information and democratization of knowledge, leading to a diffusion of power away from traditional centers and an unprecedented rise in human agency. The implications are profound. The National Defense Strategy has reoriented the defense establishment to a multipolar, great power competition framework that challenges the Services to sustain their comparative advantage across a continuum of interactive relations from peace to war. State and non-state adversaries recognize America's dominant military advantage and are adapting their operations, activities, and investments to compete with the U.S. below the level of armed conflict, principally in the information environment where the asymmetries are less pronounced. Competing effectively requires a deep and abiding understanding of Operations in the Information Environment (OIE). The Air Force has concluded that military planners, strategists, and analysts must "lead with information" and make it a core strength to compete more effectively in the information environment. This requires supporting the development of intellectual and analytic frameworks, doctrine, training and education, as well as to undertake some fundamental shifts in organizational culture to be effective. The IIJO Project is intended to inform these outcomes.

IIJO Project - Study Questions. SMA will address five primary study questions:

1. How are state and non-state actors operating in the information environment, and what can be learned from their approaches? How might this be used to inform joint force strategy and planning approaches?

2. What are suitable Operations in the Information Environment assessment frameworks and approaches?

3. What are key escalation thresholds in the information environment for priority National Defense Strategy/National Military Strategy adversaries?

4. What are relevant insights from private sector firms and non-governmental organizations on affecting perceptions and behavior on macro, meso, and microscales?

5. The orientation to leading with information represents a significant culture change for the Joint Force. How have non-Department of Defense institutions handled such organizational change?

IIJO Project Task Statement. The project plan includes a literature review, expert elicitation, invited perspective reports from domain experts, a dedicated IIJO speaker series, a net assessment of comparative U.S.-Russia-China advantages in the information environment, and modeling and simulation (computational and table top) to test key hypotheses emerging from the Net Assessment regarding effective integration of information in operations. A final integrated report that will summarize the findings of all the research teams into one document. The effort will conclude by June 2021.

G-2 M&S Office Task Statement. In support of the USAF (A3) and the SMA, the TRADOC G-2 Modeling and Simulations Office will employ the Athena Simulation to address a series of research questions developed in coordination with the USAF A3 that are intended to help frame an exploration of the strategic implications of joint information operations on great power competition in the Pacific and European theaters. The Athena Simulation will specifically be employed to test several of the explorable insights (hypotheses) developed during the Net Assessment and SME engagements.

Study Topic Development. The Athena team assessed the initial list of 35 explorable insights developed by subject matter experts and during the Net Assessment conducted as part of the Joint Staff J-39 SMA IIJO Project. This initial set of explorable insights was refined and reduced to a manageable selection of study topics which were used as the orienting framework for undertaking a study utilizing the Athena Simulation. The full list of Net Assessment explorable insights can be found in Annex A. The derived list of Athena study topics is summarized below:

1) Topic. Messaging Integrity

   Description. The example the U.S. sets is more impactful than the messages being released. Positive and proactive messaging is a more effective form of persuasive communication which needs to be coupled with actions that align with U.S. values and character. Messaging that targets the disruption of common values elicits a more significant response than that which seeks to build constructive cooperation. Additionally, attacking or criticizing an adversary's messaging is one of the least effective approaches the U.S. can employ.

   Orienting Question. How are populations influenced by messaging and actions that are consistent with U.S. values?

Explorable Insight Linkage.
- Explorable Insight #5. The example that the U.S. sets is more important than the messages released. Not necessarily about policy and coordinated efforts. The U.S. sends messages whether it is intending to or not.

- Explorable Insight #35. Media messages that disrupt common values are more likely to elicit effects than messages attempting to build constructive cooperation.

2) Topic. Perceived Domestic Stability

Description. The perception of domestic success, or incidents of internal instability and disorder, affect the great powers' level of strategic influence in the international community more than their active messaging campaigns. If negative information about Russia or China's domestic policies were leaked, or if their economic growth were to slow, then they would find it harder to increase their political influence across the international community.

Orienting Question. How do incidents of domestic instability and civil disorder undermine Chinese and/or Russian ability to contest U.S. influence in international spaces?

Explorable Insight Linkage.
- Explorable Insight #8. Chinese domestic instability and civil disorder undermine Chinese abilities to contest U.S./Russian influence in international spaces of competing interests.

- Explorable Insight #12. Russian domestic instability and civil disorder undermined Russian abilities to contest U.S./Chinese influence in international spaces of competing interests.

- Explorable Insight #34. Most of the strategic balance between principals (U.S., China, Russia) in message competition in swing states relates to the perceived domestic success of those principals, not their active messaging. Information operations have an important marginal role, but it is usually at the margin.

3) Topic. Use of Proxies

   Description. Messaging through third parties or proxies can be a more effective means of communication than when the U.S. communicates directly with many target populations.

   Orienting Question. How is the effectiveness of U.S. messaging impacted when it is communicated through third parties or proxies?

   Explorable Insight Linkage. This was a topic identified during an IIJO Weekly Planning Meeting.

4) Topic. Relevancy of Messaging

   Description. Assess messaging effectiveness that compares and contrasts a message that ignores or is irrelevant to a population's local concerns vs. one that touches on local concerns. Explore the impact and role of societal fault lines and belief systems in creating an effective messaging campaign.

   Orienting Question. How is the effectiveness of messaging impacted when it is oriented on issues significant to local noncombatant populations?

   Explorable Insight Linkage. This was a topic identified as part of a separate Net Assessment team discussion.

Study Design. Two separate instantiations of the Athena Simulation were used to model information/messaging operations and competition phase dynamics to assess potential regional stability effects.

   South China Sea Database. The first scenario is primarily centered in the Philippines with Chinese Communist Party (CCP) as the major international actor. The modeling design focuses on the circumstances and messaging surrounding the ongoing conflict involving the maintenance and sustainment, by the Government of the Republic of the Philippines (GRP), of a small outpost on the Second Thomas Shoal. The outpost is located on a naval vessel which the Philippines intentionally grounded on the shoal in 1999. The subsequent struggles concerning this outpost on the part of both China and the Philippines have been part of each country's efforts to use this situation to influence international opinion over control of the South China Sea.

   Eastern Mediterranean Database. The second scenario is primarily centered on the counties of Turkey, Greece and Cyprus, with Russia as a major actor. Turkey and

Greece have a long history of tense relations and this modeling design focuses on further understanding the circumstances surrounding the ongoing disagreements over territorial boundaries, sovereignty of several islets, the establishment of exclusive economic zones, and the unresolved dispute over Cyprus. Russia has become increasingly prominent in this dispute and it is likely that the Russians will seek to exacerbate the dispute, particularly in cases where energy rights are concerned.

Questions Architecture. The primary Athena study question and supporting questions architecture were based on the five overarching SMA research questions and the four Study Topics derived from the explorable insights (hypotheses) developed during the Net Assessment. From these topics the study objectives were identified all of which are primarily centered on how U.S. Joint Forces can more effectively use information to set conditions for regional stability and success. See Annex B for the full questions architecture.

Athena Study Question: How can U.S. Joint Forces be prepared and empowered to more effectively conduct Operations in the Information Environment?

Objective 1.0 – Determine how the communication of U.S. values can mitigate the effectiveness of adversary messaging during great power competition.

Objective 2.0 – Explore how the perception of a key regional actor's domestic stability can influence the opinion of local noncombatant populations.

Objective 3.0 – Explore how the use of proxies can influence the effectiveness of a key regional actor's messaging campaign.

Objective 4.0 – Determine how the local support for a key regional actor is affected by messaging that is oriented on issues that are generally insignificant to the local noncombatant population.

The Athena Simulation. The primary computational modeling tool employed in support of this study was the Athena Simulation. Athena is a sociocultural modeling capability which supports a decision maker by providing both a framework to better understand complex multivariate problems and a simulation for anticipating the long-term consequences of engagement choices across the totality of the operational environment, as described by the acronym PMESII-PT.[2]

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[2] PMESII-PT -- Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time

Athena Simulation Description. Athena is a scalable, single user, laptop-based, course of action development and analysis capability used to anticipate the consequences of various DIME-FIL[3] engagement activities upon noncombatant populations. Athena enables the analysis of second and third order effects upon local civilian groups and those group's possible responses in order to discern potential outcomes from political, military, economic and social interventions. Athena allows leaders and analysts to understand the intended and unintended effects of their proposed actions through a simulation process that incorporates social science "universals" into course of action analysis and campaign planning. It enables the examination of interdependent political, economic, security/military, and information dynamics; anticipation of emergent actors, factions, and powerbases; and compares and contrasts multiple courses of action.

The Athena Simulation is designed to be culturally agnostic, i.e., to assess conditions and determine outcomes which will be applicable anywhere in the world. To accomplish this, the social science universals are mapped into Athena group satisfaction vis-à-vis four common concerns. The four concerns are: 1) autonomy with respect to governance, i.e., the group's satisfaction or dissatisfaction with extant governance and/or a group's ability to influence governance; 2) quality of life, i.e., whether the actor or group is satisfied or dissatisfied with their life conditions which include things like employment, healthcare, infrastructure, education, availability of food and water, etc.; 3) culture, i.e., whether one's sacred sites, artifacts, traditions and taboos are respected or denigrated; and 4) safety, i.e., whether the individual or group feels secure in their environment and to what extent. Each of the four concerns is assigned a relevant saliency differentiating between one group and another, what is the most important concern and weighting that appropriately. The four concerns together translate into a group mood weighted by the group's saliency for each concern. The concerns are a representation of how much a group desires change based on impact on those concerns. See Annex C for an expanded description of the Athena Simulation.

Constraints – Limitations – Assumptions

Constraints.
- Restrictions imposed by the U.S. Government involving the collection of data and related analysis of U.S. civilian populations required that the study objectives and modeling focus only on populations external to the United States.

- Availability of quantitative data to fully inform the study objectives.

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[3] DIME-FIL -- Diplomatic, Information, Military, Economic, Financial, Intelligence and Law Enforcement

- COVID19 Restrictions to travel to the Pentagon and/or USAF A3 Headquarters to meet with SMEs and members of the USAF staff.

- Accessibility of USAF staff to address study design questions.

- Availability of SMEs to provide regional information, provide data sources, and/or assess collected data.

- The level of classification. The intent was to keep this study at the unclassified level which limits access to various types of data as well as bounding potential scenario designs.

Limitations.
- The study is limited by the ability of the Athena Simulation to fully model all aspects of the question architecture associated with information messaging.

- The Athena post-processor can only calculate a finite number of regional actors so the size of the primary database is limited.

- The study is limited by the information available and the accuracy of that information based upon known misrepresentations and skewed reporting by the primary governments involved (China and Russia).

- Availability of SMEs to review and approve the Athena data interpretations and/or to support the assessment of analytic insights.

Scenario Planning Assumptions.
- None Required.

Use Cases. Use cases are scenario vignettes that provide a series of potential futures that establish unique modeling conditions which generate results that can be compared and contrasted to assess stability conditions and determine how those futures will resonate with various civilian groups and key actors. These use cases are supplemented by excursions that allow some specific analytic element to be investigated or tested in greater detail. The primary use cases and excursions are outlined below.

South China Sea Database.

Base Case. The Base Case establishes a set of conditions that will enable a comparative analysis with messaging constructs employed in other use cases. In the base case, U.S.

messaging will be oriented on maintaining the relationship between the U.S. and the Philippines as a means of mitigating Chinese influence, particularly with President Duterte. This messaging will be coupled with economic engagements actions.

Use Case #1. U.S. Support with Acknowledgement. Use Case #1 explores the impact of the U.S. using messaging not well supported by active measures to assist the Philippines and counter Chinese actions. The U.S. openly acknowledges its own domestic instability issues, indicating a desire to address the problem at the highest level of national leadership. U.S. leadership also indicates support for the Philippines and communicates with audiences and leadership levels in the Philippines that will have greater effect. The U.S. however, does not provide any practical action with the messaging and is unwilling to commit to providing an increased military presence or any significant increase to current levels of economic investment in the Philippines.

Use Case #2. U.S. Support with No Acknowledgement. Use Case #2 explores the impact of the U.S. using both messaging and active measures to indicate their support to the Philippines. Unfortunately, the messaging is conducted at levels and with individuals that do not accurately or effectively pass along the intended message. Additionally, the U.S. does not address its own issues of domestic instability, indicating only a limited concern for these at the highest level of national leadership. The U.S. does however, begin providing increased levels of military and economic support and secures both verbal and concrete support from other allied and partner nations.

Eastern Mediterranean Use Cases

Use Case #1. Base Case. Use Case #1 establishes a set of conditions that will enable a comparative analysis with messaging constructs employed in other use cases. In the base case, Russian messaging will be oriented on making a Russia-friendly country out of Cyprus. As a member of the EU, Cyprus will be postured to support Russian efforts to lobby the EU and to serve as a communications channel for advocating Russian narratives, taking advantage of the Greek crisis, and exploiting rifts and fissures in European unity.
- Delay, Completeness and Relevance without Accompanying Action ("Say Only")
    - Case #1a: Preemptive U.S. messaging
    - Case #1b: Normal delay for U.S. counter-messaging (authority delays)
    - Case #1c: Immediate response using pre-planned U.S. counter-messaging

- Delay, Completeness and Relevance with Accompanying Actions ("Say & Do")
    - Case #1d: Preemptive U.S. messaging
    - Case #1e: Normal delay for U.S. counter-messaging (authority delays)
    - Case #1f: Immediate response using pre-planned U.S. counter-messaging

Use Case #2. Value-Based Messaging. Employs the same respective messaging utilized in use cases #1a-f, above, but this time, with U.S. messaging that is inconsistent with U.S. values (not credible to foreign audience).

Use Case #3. Perceived Domestic Stability. Employs the same respective messaging utilized in use cases #1a-f, above, but this time, with Russian messaging that is undermined by Russian instability at home ("say & do" problem).

Use Case #4. Relevance of Messaging. Employs the same respective messaging utilized in use cases #1a-f, above, but this time, with U.S. messaging that is oriented on issues that are generally insignificant to local noncombatant populations.

Use Case #5. Combined Effects. Combines the best of use cases #1a-f, with optimal solutions identified in use cases #1, 2, 3 and 4, thereby integrating value-based, relevant messaging with the perception of Russian domestic stability.

Belief Systems. A key element of Athena modeling involves defining the primary belief systems in a region. These define both beliefs and significant fault lines that drive human behavior and which can potentially divide people groups.

South China Sea Database. This set of belief topics are essentially focused on the Philippines and seek to capture both the sense of nationalism that drives the civilian response to the government and the growing influence of China on regional stability. The three belief systems listed below are considered the primary drivers behind the results generated in the modeling runs. A complete list of the beliefs used in this study can be found in Annex D.

- **Topic #6**: Encroaching China. For centuries, the Filipino and Chinese people coexisted peacefully. However, in 1995, China began making aggressive attempts to claim Philippine territory in the West Philippine Sea. The Philippines must turn to the international community and forge stronger defense ties to other nations — including the United States — to end China's bullying and protect its sovereignty.

- **Topic #7**: China's Corrupting Influence. The government of China is corrupt and Chinese influence is leading to increased corruption in the Filipino government. China has portrayed itself as a benevolent neighbor to the Philippines, but scandals involving Chinese firms have shown China's true intentions to exploit the Philippines' resources and its people. Filipinos must remain wary of furthering ties to authoritarian China. Only through vigilance can Filipinos preserve their values, secure the country's prosperity, and prevent suffering at the hands of an outside power.

- **Topic #8**: <u>Embracing the Dragon</u>. The Philippines has traditionally looked to the West for economic support but with Western countries now mired in their own scandals and economic crises, the Philippines must look to the East, where China has emerged as a global economic power. Through stronger ties to China, the Philippines can build its industry, create jobs for Filipino youth, and ensure a continued march toward prosperity.

Eastern Mediterranean Database. Listed below are short descriptions of the primary belief topics supporting this information operations struggle to gain influence over the Republic of Cyprus. A complete list of the beliefs topics and descriptions used in this study can be found in Annex D.

- **Topic #7**: <u>Turkey Position on Greek Nationalism</u>. The Turkish people consider Greek nationalism as an agenda for energizing Greek-sponsored right-wing intolerance by organizations, political parties, and individuals all of which increases instability on Cyprus.

- **Topic #8**: <u>Turkey and the NATO Alliance</u>. NATO is a fundamental pillar of Turkish defense and security architecture.

- **Topic #14**: <u>The West has Betrayed Greece</u>. Greece has been economically betrayed by the West and should to turn to the East (Russia and China) to cultivate new investment opportunities.

Neighborhoods. In Athena, neighborhoods are the system for decomposing the study region (playbox) into manageable portions for analysis. The playbox can be broken down in various ways but most commonly is described based on governance.

South China Sea Database. For this study, the Philippines playbox has been decomposed into 19 neighborhoods (see Figure #2) which are configured along lines of governance (Regions). The naming convention aligns regions primarily with the major people groups found in each neighborhood. See Annex E for a full list and expanded descriptions of each Athena Neighborhood.

Key neighborhoods in the South China Sea database include:
- National Capital Region (Manila)
- Southwestern Tagalog (Mimaropa / Palawan)
- Central Luzon (Region III)
- Northern Mindanao (Region X)
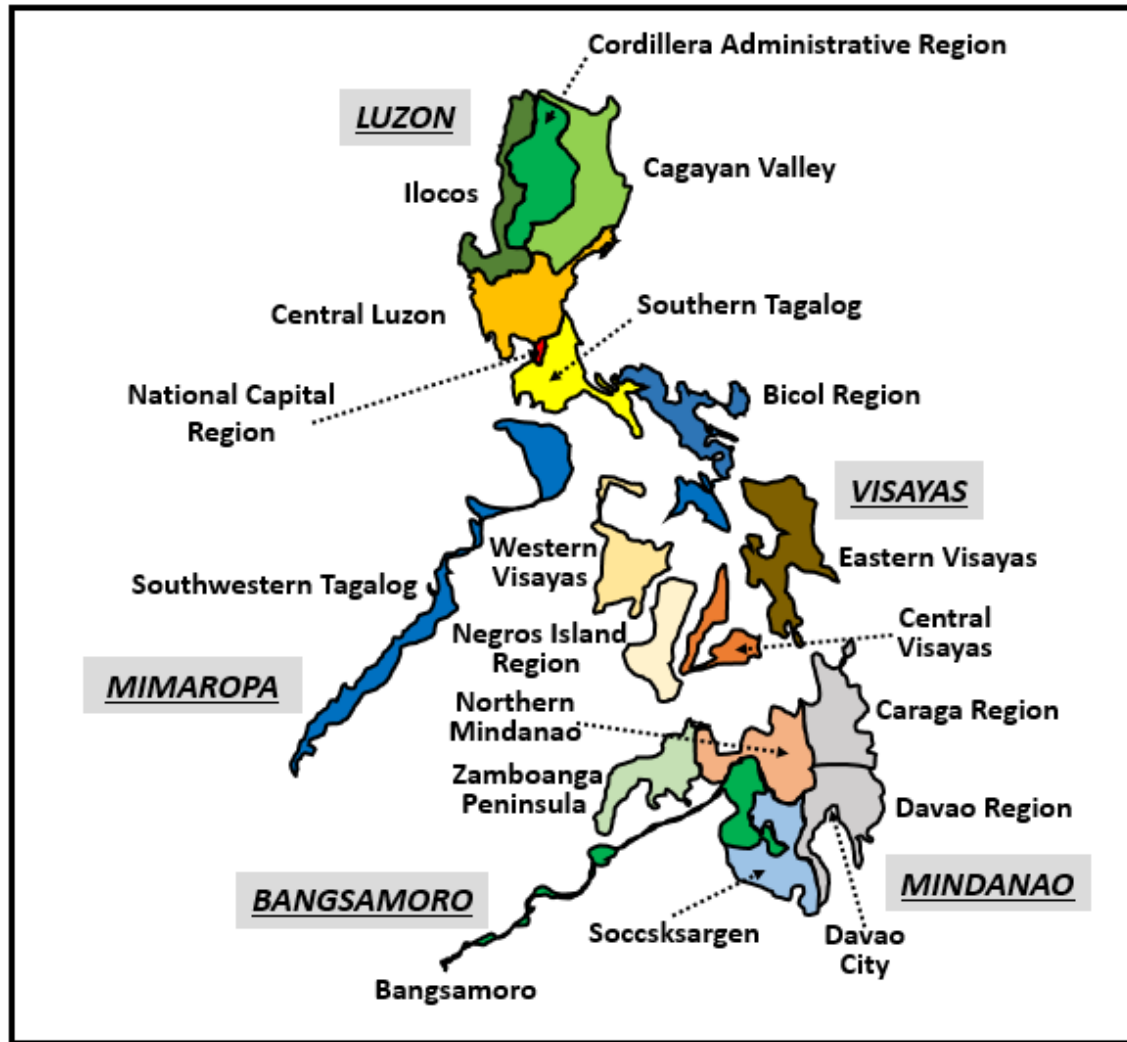- Bangsamoro (Bangsamoro Autonomous Region in Muslim Mindanao)

Figure #2. Philippines Database Athena Neighborhood Long Names

Eastern Mediterranean Database. For this study, the Eastern Mediterranean playbox has been decomposed into 22 neighborhoods (see Figure #3) which are associated with the three primary countries in the study: Turkey, Greece and Cyprus. The neighborhoods are configured along lines of governance with several smaller provinces being combined into larger neighborhood regions. See Annex E for a full list and expanded descriptions of each Athena Neighborhood.

Key neighborhoods in the Eastern Mediterranean database include:
- Northern Cyprus (Turkish Republic of North Cyprus)
- South Cyprus (Republic of Cyprus)

Figure #3. Eastern Mediterranean Neighborhoods

Civilian Groups. A key element for understanding regional stability dynamics is the defining of the civilian groups that comprise the local noncombat populations. Civilian groups have belief systems and relationships with key actors which can be influenced by actors as they apply resources, generally forces, economics and/or messaging in a region. Understanding how a population's mood and satisfaction with its circumstances are influenced over time is a primary Athena output.

South China Sea Database.

There 42 civilian groups in the South China Sea database derived from several people groups found in the Philippines. Short descriptions of the six primary people groups are provided below. See Annex F for a complete list of the civilian groups.

Primary list of people groups from which the full list of civilian groups is derived:
* Tagalog. The Tagalog form the largest ethnic group in the Philippines. Indigenous to central Luzon, the Tagalog have spread to all the Philippine islands. Their language, also known as Tagalog, is the basis for the national language, Filipino, which also includes words from the languages of several of the Philippines' many ethnic groups. They are a majority Catholic country with a growing Protestant segment.

- Visayan. The Visayans are the second largest ethnic group in the Philippines, originating from the Visaya islands, between Luzon on the north and Mindanao on the south. Visayans have also spread throughout the islands.

- Ilocano. The Ilocanos are the third largest ethnic group (if Cebuano, the largest Visayan group, are not counted separately) in the Philippines. Originating from the northwest portion of Luzon, the Ilocanos also have a presence throughout the island chain.

- Moro. The Moros are a collective designation for several ethnic groups indigenous to Mindanao who are Muslim. The Moro have a long history of insurgency and a desire for either independence or autonomous rule in Mindanao. This desire continues and may even be intensified since the Bangsamoro Organic Law has only been partially effected since being passed in 2018.[4]

- Manila American Expatriates. American expatriates in the Philippines are estimated to number between 220,000 and 650,000 or more. Their presence exerts a cultural influence. The U.S. hosts more Filipinos than any other country outside of the Philippines, thus many Filipinos in the Philippines have family connections in America; many of the expatriates are U.S. military veterans and many American expats work for major American companies which impact business circles. Additionally, their presence reminds everyday Filipinos (not Duterte) that America is an attractive place, a rich place and a strong place, and that America is a treaty ally. This cultural connection, plus the importance of English as the Philippines' second language, and the sheer numbers of Filipinos working in the U.S., helps keep the average Filipino supporting the U.S.

- Manila Chinese Filipinos. Ethnically, Chinese Filipinos make up less than two percent of the population, though they tend to be wealthy, controlling many large conglomerates in the country. There is a history of resentment towards wealthy, ethnically Chinese Filipinos in the Philippines (as there is throughout Southeast Asia towards ethnic Chinese populations). This resentment may be magnified by current tensions with China but there is no evidence of collusion between ethnic Chinese Filipinos and China.

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[4] The Bangsamoro Organic Law, Republic Act No. 11054, also known as the Bangsamoro Basic Law and by its full title as the "Organic Law for the Bangsamoro Autonomous Region in Muslim Mindanao", is a Philippine law which provides for the establishment of the autonomous political entity known as the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM).

Eastern Mediterranean Database.

There 86 civilian groups in the Eastern Mediterranean database which are centered on several primary people groups found across the Eastern Mediterranean. Additionally, several of the civilian groups have been established based on economic status. Short descriptions of the eight primary people groups and/or economic designations are provided below. See Annex F for a complete list of the civilian groups.

Primary list of people groups from which the full list of civilian groups is derived:
- Kurds and Social Democrats. This group is comprised of the Kurdish people in the region who have migrated to Greece mainly to escape persecution from Iraq but also from Southeastern Turkey. Social democrats are represented by the Social Democratic People's Party in Turkey, a center-left, secular political party.

- Moderate Opposition. This group is primarily represented by the Republican People's Party in Turkey and by the Pan Hellenic Socialist Movement (PASOK) in Greece.

- New Ottomans. This group desires returning Turkey back to the grandiosity and status of the Ottoman Empire.

- Refugees. Incoming migrants fleeing persecution, war, or seeking better opportunities.

- Mainstream Turks. The largest political party is the right-wing Justice and Development Party, led by the current President of Turkey, Recep Tayyip Erdogan. Although the party lost some ground in the 2019 election, it still comprises a majority of Turkish representation at most levels of government.

- Working Class and Poverty Groups. These groups comprise approximately 20% of the Greek population combined. The income range is between 3,000 – 6,000 Euros or less than 3,000 Euros for the impoverished group.

- Middle Class. The Middle class comprises approximately 54% of the population in Greece, with a yearly income between 6,000 – 44,000 Euros.

- Upper Class. Wealthy and upper class populations are a combined 25% of the population in Greece, defined by a yearly income higher than 130,000 Euros for wealthy and with a yearly income higher than 75,000 Euros for Upper Class.

Key Actors. Actors can be individuals, organizations, political parties, or separate nations who are seeking to influence conditions within the region. Actors have resources, generally forces, economics and/or messaging that they apply leading to them gaining or losing influence and potentially shifting control in the region.

South China Sea Database. There are four Actors modeled in Athena for this portion of the study. There are two groups that influence the Philippines in general, and two international actors. A complete list of Actors with a short descriptions of each actor is located in Annex G.

Philippines
- Government of the Republic of the Philippines. President Rodrigo Duterte.
- Armed Forces of the Philippines.

International Actors
- Chinese Communist Party.
- United States.

Eastern Mediterranean Database. This database includes 20 actors of whom ten are centered in Greece while two are in Turkey and two are in Cyprus. In addition, there are four international actors represented in the database. See Annex G for a full list of Actors.

Greece
- Greek President. Katerina Sakellaropoulou.
- Prime Minister of the Hellenic Republic. Kyriakos Mitsotakis.
- Greek Orthodox Church.
- Greek Military.
- Lambrakis Press Group/Greek Media.
- Greek Mafia.
- Romani People of Greece.
- Muslim Minority.
- Golden Dawn. A popular far-right political party in Greece.
- SYRIZA Party. The Progressive Alliance.
- North Macedonia Leader. An unnamed actor included in the Athena database.

Turkey
- Nation Alliance Party (Turkey) Opposition. A center-left to center-right party.
- Peoples' Democratic Party (Turkey). A left-wing activist party.
- Justice and Development Party (Turkey). A right-wing populist party.

Cyprus
- Turkish Cypriot Leader. An unnamed actor representing an influential Cypriot leader with affiliations to Turkey.
- Greek Cypriot Leader. An unnamed actor representing an influential Cypriot leader with affiliations to Greece.

International Actors
- North Atlantic Treaty Organization.
- People's Republic of China. The Government of China.
- Russia. The Government of Russia.
- United States. The United States Government.

Chapter 2: Analytic Results and Insights

The Athena Simulation was employed to consider the effect of information operations and great power messaging tactics on the support of the civilian populations of the Philippines and Cyprus for their respective governments, the Chinese and Russian governments, and the U.S. and allied presence in the region, generally measured in terms of popularity and legitimacy. Six primary insights were developed for the South China Sea scenario and four insights came from the Eastern Mediterranean scenario from the research and analysis conducted during the study. A summary of those insights is provided below. Details of the analysis for each insight follow.

Summary of Insights

South China Sea

Insight #1. The U.S. enjoys greater support than the Chinese Communist Party in the Philippines regardless of how the U.S. is approaching competition or conflict in the South China Sea.

Insight #2. Support for the U.S. in the Philippines is resilient.

Insight #3. When the U.S. Government is willing to openly discuss its domestic civil unrest, Filipino support for the U.S. increases.

Insight #4. Tangible actions demonstrating allied and partner nation support greatly increases Filipino support for the U.S.

Insight #5. The U.S. use of friendly Philippine politicians as proxies for criticizing the Chinese Communist Party is mildly effective at increasing local popular support for the Government of the Republic of the Philippines.

Insight #6. The Chinese Communist Party's use of relevant messaging to encourage foreign investment/development and Filipinos of Chinese descent as proxies for anti-U.S. communications was highly effective at reducing local support for the U.S.

Eastern Mediterranean

Insight #1. Bureaucratic delays in U.S. and EU messaging responsiveness allow the Russians to gain an advantage in the broader information environment.

Insight #2. Preemptive U.S. and EU messaging proved ineffective when seeking to address Russian messaging tactics; however, when the U.S. and EU used immediate counter-messaging, they realized significantly better success.

Insight #3. Even with immediate U.S. counter-messaging, influence can be lost by allowing Russia to frame issues in the media first.

Insight #4. Despite messaging tactics employed, local civilian populations are most likely to align with and support the regional actors with whom they have the most commonality of beliefs.

Analytic Description and Detail - South China Sea

Insight #1. The U.S. enjoys greater support than the Chinese Communist Party in the Philippines regardless of how the U.S. is approaching competition or conflict in the South China Sea.

Description. The Philippines continues to share a strong relationship with the U.S. which has been developed over the course of many years, particularly as a result of U.S. assistance during World War II and seventy years of formal alliance. More recent strategic communications by the CCP, to include the offer of developmental aid to the Philippines, does lower the Filipino support to the U.S. to a small extent while increasing support for the CCP, yet the appeal of the CCP remains several orders of magnitude lower than that of the U.S. Government in the Philippines despite President Duterte's attempts to distance the country from its chief ally.

Discussion/Analysis. Athena Simulation results indicate that the Philippines continues to share a strong relationship with the U.S. as evidenced by the generally positive trend lines shown on the graphic at Figure #4. Despite President Duterte's attempt to distance the country from its ally and other actions by the CCP this trend remains essentially positive.

In this scenario, the CCP's strategic communications include an offer of development aid to the Philippines which is related via proxies, Filipinos of Chinese descent. This does result in a temporary reduction of popular support for the U.S. by the Filipino civilians and an associated increase in support for the CCP for a short period of time; however the appeal of the CCP is multiple orders of magnitude lower than that held by the U.S. Government in the Philippines, and the indicated positive relationship with the U.S. recovers quickly under all use cases.
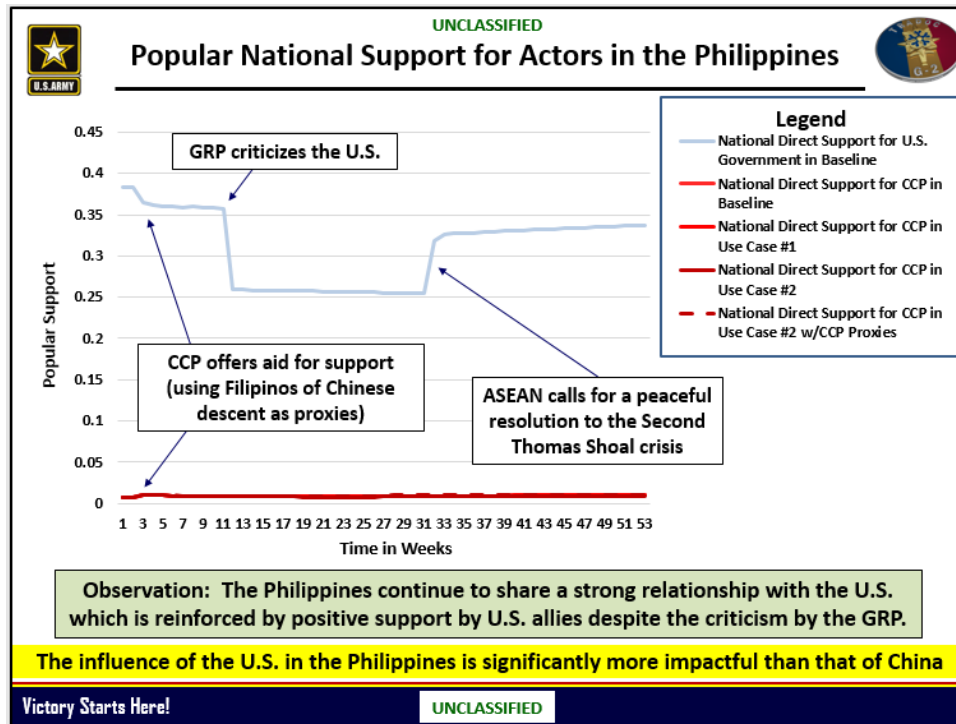
Figure #4. U.S. influence in the Philippines is greater than that of China

Later in the modeling runs, when U.S. allies and partners take steps to actively support the Philippines, e.g., Indian and Japanese flyovers and when the Association of Southeast Asian Nations (ASEAN) calls for a peaceful resolution to the crisis over the Second Thomas Shoal, Athena results indicate that there is an increase in popular support for the U.S. while support for the CCP remains minimal and essentially static.

Insight #2. Support for the U.S. in the Philippines is resilient.

Description. A steep decline in popular support for the U.S. occurs when the GRP criticizes the American government, yet most of this loss of support is recovered in the baseline run without requiring any U.S. strategic communication.

Discussion/Analysis. Though Filipinos can become disillusioned with the U.S. and may disagree with some American policies, the overall opinion trends toward confidence and approval of U.S. actions. Athena results shown in Figure #5 demonstrate the impact of GRP criticism of the U.S. and the recovery that occurs in the baseline and both use cases reflecting resiliency of the relationship between the U.S. and the Philippines.

In this scenario, the GRP criticism of the U.S. position on resolving the Second Thomas Shoal crisis, primarily being voiced by President Duterte, generates a distinct drop in popular support for America and a small bump in support for the CCP. However, when

ASEAN calls for all parties to peacefully resolve the crisis, the confidence of the Filipino people reasserts itself as reflected in the rapid recovery and generally positive trend of the relationship between the U.S. and the Philippines moving forward. Other factors introduced in the use cases produce greater recovery trajectories but all reflect the resiliency of the relationship of the U.S. with the people of the Philippines.
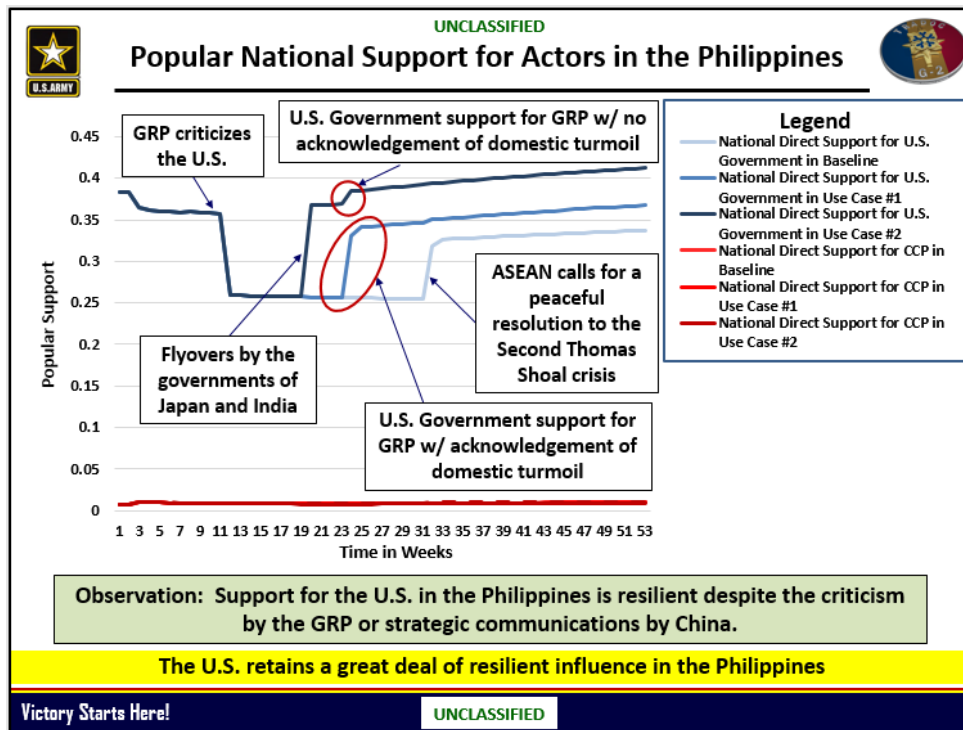

**Figure #5. The U.S. relationship with the Philippines is resilient**

Insight #3. When the U.S. Government is willing to openly discuss its domestic civil unrest, Filipino support for the U.S. increases.

Description. Great powers are frequently reluctant to openly and forthrightly admit to incidents of civil unrest or domestic instability. Athena modeling however, shows that when the U.S. is willing to address issues of domestic instability, particularly ones of potential interest or significance to a civilian audience in the Philippines, then the results of that engagement are surprisingly positive.

Discussion/Analysis. In the base case, President Duterte is modeled as presenting information critical of the U.S., essentially stating that the U.S. cannot be trusted because they gave away Panatag (Scarborough Shoal),[5] which results in a decline in Filipino support for America beginning in Week 10. In the simulation run for Use Case #1, a

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[5] In 2012, the U.S. negotiated a withdrawal and only the Philippines complied. China strengthened its presence and has prevented Philippine vessels from returning since.

message critical of the CCP but supporting the GRP is broadcast as part of U.S. Government strategic communication campaign with no accompanying candor or openness about America's own domestic turmoil concerning Asian American protests. In the simulation run for Use Case #2, a more candid series of messages with the U.S. Government admitting to the protests, pledging to take action, and proclaiming, "just as Asian Americans should not be attacked or bullied, the U.S. will stand with the Philippines as China tries to bully Filipinos," is broadcast. Interestingly, support for the U.S. by the people of the Philippines increased in both cases, but more so and more quickly, when the U.S. is candid about its own troubles. The Athena modeling results shown in Figure #6 clearly reflect that being open and forthright can have beneficial effects in the long term and that this approach may be more effective in distinguishing U.S. values from those of the CCP, which is considerably less forthcoming about domestic challenges.
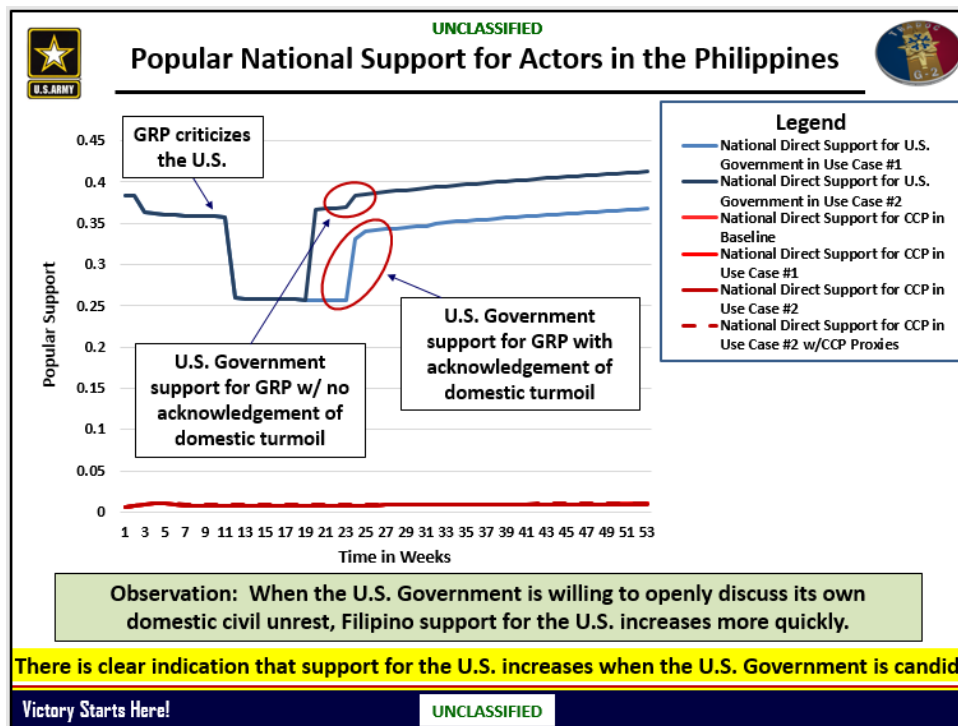
Figure #6. Forthright U.S. communications resonate better with Filipino populations

This topic of support for Asian Americans living in the U.S. is not only a form of clear and honest communications but also reflects a topic of interest to the Filipino audience. As indicated by the continued flat trajectory of the graph depicting Filipino support for the CCP, efforts on the part of the CCP to either use the topic of violence against Asian Americans in the U.S. or to otherwise counter-message the candid and supportive messaging by the U.S. Government is ineffectual, further highlighting the strong positive relationship that exists between the U.S. and the people of the Philippines. Filipinos and Americans value candor and transparency from their governments. Given that, as well as

the positive affinity for the U.S. in the Philippines, even admissions of imperfection in the U.S. serve to strengthen support over attempts to ignore domestic American unrest.

It should be further noted that many Filipinos serve in the U.S. Armed Forces and there are more American expat veterans in the Philippines than in any other foreign country. As well, there are more Filipinos working in the U.S. than in any other country outside of the Philippines, so this topic of violence against Asian Americans is one that resonates strongly with these populations.

Insight #4. Tangible actions demonstrating allied and partner nation support greatly increases Filipino support for the U.S.

Description. When tangible actions to demonstrate allied and partner nation support for the Philippines (e.g., Japanese and Indian military flyovers) were paired with positive, supporting messaging by the U.S., Athena modeling results indicated a significant increase in support by the Filipino populations for the U.S. and its objectives in the region.

Discussion/Analysis. Japanese and Indian military flyovers are modeled in Athena as tangible actions that are conducted in coordination with a U.S. messaging campaign supportive of the Philippines. The combination of supportive messages and tangible action influences Filipino support for both the U.S. and the CCP and results in a double impact as the approach resonates positively with the target populations. When similar supportive information operations modeling is conducted without the tangible actions, see Figure #7, the results indicate that Filipino support for the U.S. is not improved as significantly as it is when it is paired with concrete action.

Athena Simulation results demonstrate that the allied and partner flyover, showing U.S. and international resolve and support for the Philippines in response to provocations from CCP (specifically, China's attempt to prevent the Philippines from improving its outpost on Second Thomas Shoal and replenish supplies for the outpost, as well as Chinese messaging about its "unquestioned" and "historic sovereignty" over the South China Sea) was an action that resonated broadly and moderately with Filipinos, especially nationalists and non-Tagalog fiscal conservatives. These results show the value of allied and partner actions being coupled with supportive messaging.
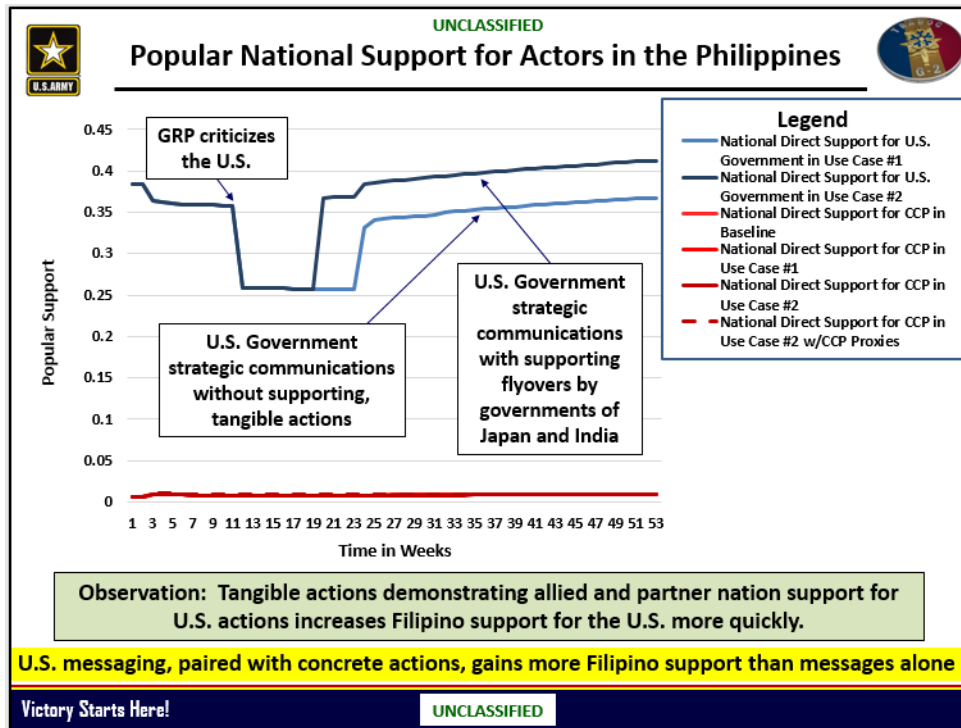
**Figure #7. U.S. messaging when paired with actions show greater success**

Insight #5. The U.S. use of friendly Philippine politicians as proxies for criticizing the Chinese Communist Party is mildly effective at increasing local popular support for the Government of the Republic of the Philippines.

Description. As part of a U.S. messaging campaign, several conservative, Filipino, Nacionalista Party politicians were identified and used to broadcast messages critical of the CCP. This approach of using friendly Philippine politicians as proxies for criticizing the CCP is somewhat effective at increasing Filipino support for their government.

Discussion/Analysis. A U.S. messaging campaign was modeled in Athena that sought to criticize CCP actions in the Second Thomas Shoal dispute and more broadly to discredit Chinese objectives in the South China Sea; however, in this excursion, the primary communicators of this message were conservative, Filipino politicians.

Messages include the fact the CCP has repeatedly tried to prevent resupply to and rotation of the "heroes" the Philippines station on its outpost; Ayungin (Filipino name for Second Thomas Shoal) is within the Philippine Exclusive Economic Zone (EEZ), as recognized by the UN Convention on the Law of the Sea (UNCLOS), and is therefore theirs to protect as Filipinos see fit; Chinese claims, specifically in the Philippine EEZ and more generally throughout the West Philippine Sea are illegal, as determined by the

International Arbitration Court in 2016; and the U.S. agrees that China's actions constitute illegal bullying.
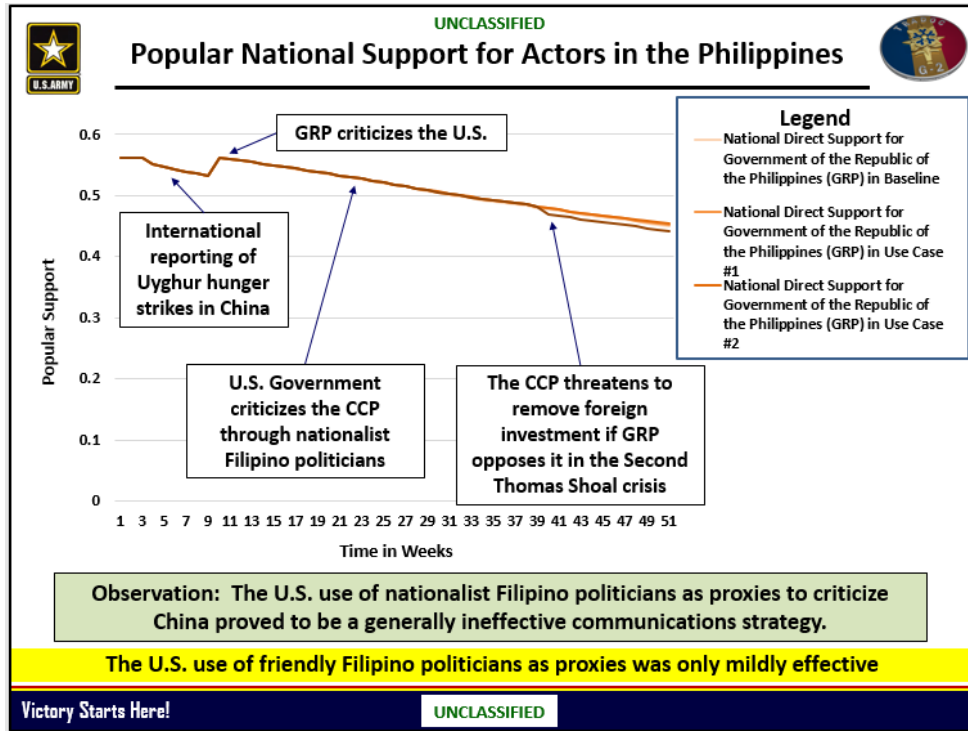
Figure #8. Nationalist Filipino politicians serving as U.S. proxies is ineffective

The proxy approach to strategic communications had no direct impact on support for U.S. in the Philippines but did increase local popular support for the GRP to some degree, see Figure #8. Athena modeling results show that the relatively minor effects of a proxy approach are of no value for improving the U.S. standing with the people of the Philippines and of only limited value for improving the general support of the Filipino people for the GRP.

Insight #6. The Chinese Communist Party's use of relevant messaging to encourage foreign investment/development and Filipinos of Chinese descent as proxies for anti-U.S. communications was highly effective at reducing local support for the U.S.

Description. As part of a CCP messaging campaign, Filipinos of Chinese descent were used to broadcast messages implicitly critical of the U.S. This approach of using Filipinos of Chinese descent as proxies for criticizing the U.S. actions in the region provided a highly effective means for the CCP to undermine local Filipino support for the U.S.

Discussion/Analysis. A CCP messaging campaign was modeled in Athena that sought to undermine the relationship and confidence ordinary Filipinos have with the U.S. The

CCP utilized "Tsinoys", the Filipino term for Filipinos of Chinese descent, as proxies to carry implicitly anti-American messages to the various local civilian populations. The CCP sought to leverage the cultural and underlying belief systems of the local populations to more effectively communicate their messages criticizing the U.S.

The simulated CCP offer of Davao regional investment had the potential to increase support for the CCP while simultaneously lowering support for the U.S. to the extent that the message resonates with audiences. Athena Simulation results, as shown in Figure #9, show the effectiveness of the CCP employing Tsinoys as proxies for anti-U.S. communications.
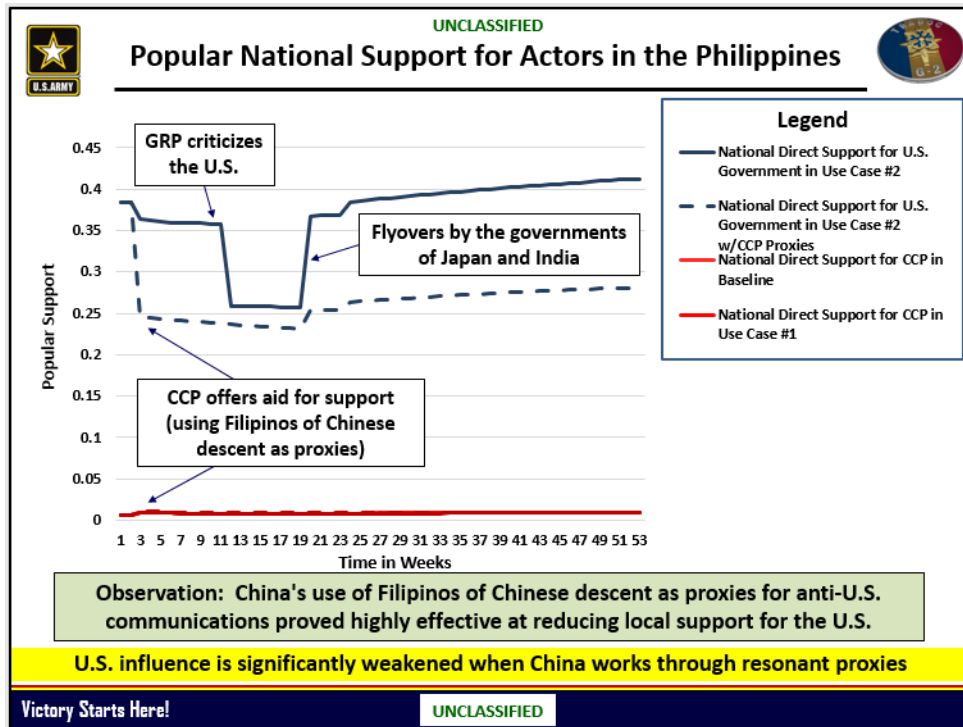
Figure #9. Filipinos of Chinese decent serving as proxies for China is very effective

Athena modeling shows that not only are Filipinos of Chinese descent more acceptable to a broad Philippines audience, but U.S. popular support did not recover much over the course of the year-long run. At the end of a year, support for the U.S. is at its lowest level. Though the simulation used Tsinoys as proxies – supporting the CCP and implicitly communicating messages critical of the U.S.– it is important to remember, that as tension with China has increased, Filipinos of Chinese descent have been careful to avoid showing any semblance of partiality towards China. Tsinoys do not want to be perceived as a fifth column, rather they want to be seen as Filipinos first.

Economics and perceptions of success in business are additional factors influencing this lowering of support for the U.S. by the Filipino people. As is the case elsewhere in SE Asia, and commonly throughout the Chinese diaspora, ethnic Chinese, and in this case Tsinoys, have been very successful in business. Tsinoys control much of the wealth in the Philippines. Therefore a decision to promote Chinese investment by the Tsinoys could be couched in purely business terms, and supporting such investment could be implicitly perceived as criticizing the U.S. One other factor, in the Davao region where support for the CCP is highest, this support and a concomitant lowering of support for the U.S., might also have more to do with the population responding to President Duterte's anti-American views, as he is seen as something of a hometown hero in the Davao region.

Analytic Description and Detail - **Eastern Mediterranean Insights**

Insight #1. Bureaucratic delays in U.S. and EU messaging responsiveness allow the Russians to gain an advantage in the broader information environment.

Description. In the Base Case, the U.S. and EU struggled with traditional bureaucratic delays (e.g., multiple layers of approvals required, etc.) while processing their counter-messaging responses to the Russian information campaign. Consequently, the more aggressive, responsive and decisive Russian messaging is able to reverse influence roles with the West in as little as 24 weeks.

Discussion/Analysis. Athena modeling demonstrated that the bureaucratic delays typical to the process of U.S. and EU messaging conducted in response to various forms of Russian messaging allowed the Russians to gain an advantage in the broader information environment eventually leading to a reversal influence roles in the region, see Figure #10.

The Russians are able to gain significantly more influence across the Eastern Mediterranean region than the West through their complex forms of information attack. The Russian messaging campaign yields the most influence (most notably in the Republic of Cyprus) at the expense of the U.S. and EU when it conducts information operations that make the West appear weak, highlights U.S. failures in "say-do" issues (say one thing, do another, e.g. topics including discrimination, income inequality, etc.), or when it releases fake news propaganda.

In parallel, Russia makes effective use of economic concessions and partnerships with the Republic of Cyprus which are not immediately countered by the U.S. and EU. This is

especially important in the Republic of Cyprus because their economic situation makes them more vulnerable[6] to Russian monetary influence.
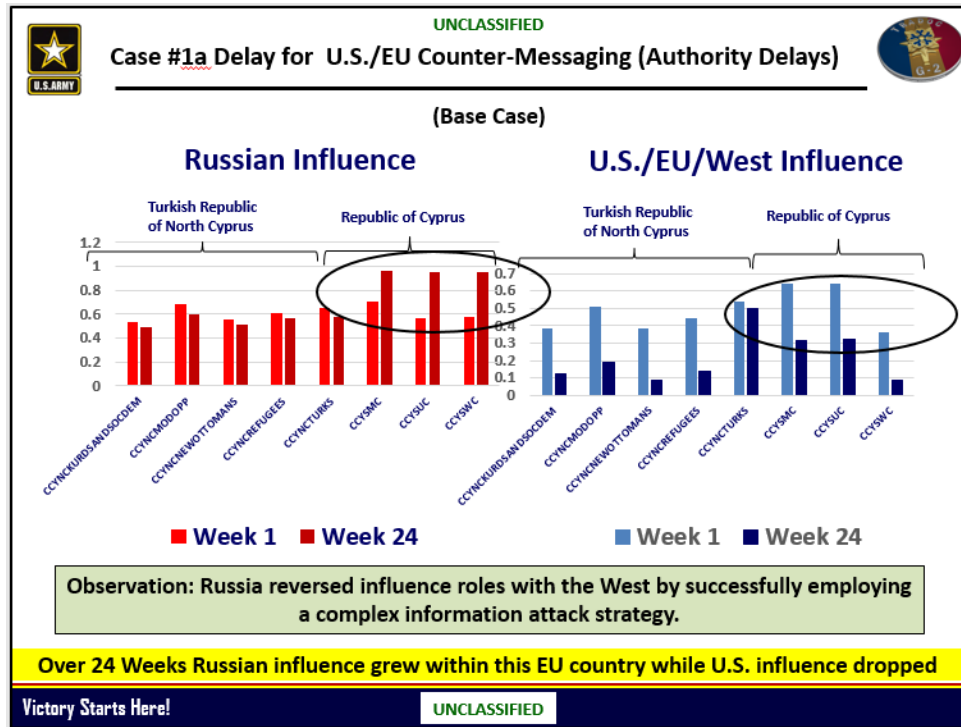
**Figure #10. Standard U.S. and EU Coordination and Authority Delays**

The delay in U.S. and EU counter-messaging (reflecting typical coordination requirements and authority delays) affects the level of U.S. and EU influence in the Republic of Cyprus. At the beginning of the modeling runs, the U.S. holds the advantage in the general conduct of information operations across the region. As the scenario unfolds, however, the U.S. exhibits an inability to effectively counter Russian messaging attacks on a weekly basis. Because of the delays caused primarily by bureaucratic coordination requirements slowing the initiation of a complex messaging response during this critical 24-week period, the relative levels of influence maintained by both the U.S. and Russia are significantly altered. This lag time in U.S. and EU responsiveness enables Russian influence to grow within Cyprus, an EU member country, while simultaneously the U.S. and EU support and influence decline. This Athena modeling result suggests that more responsive and immediate counter-messaging is necessary to maintain influence in the region and that delays will prove costly in terms of lost confidence and support.

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[6] Cyprus's Russian-speaking population is put at 35,000-40,000.

Insight #2. Preemptive U.S. and EU messaging proved ineffective when seeking to address Russian messaging tactics; however, when the U.S. and EU used immediate counter-messaging, they realized significantly better success.

Description. When the U.S. and EU employ preemptive messaging techniques and sought to get ahead of the Russian Federation's information cycle and objectives it helped defend against focused information operations being conducted but was generally of only limited value. What proved to be much more effective was when the U.S. and EU employed aggressive and rapid counter-messaging in response to Russian information operations.

Discussion/Analysis. When the U.S. employs preemptive messaging in an effort to get in front of the Russian information cycle or interrupt Russian messaging campaign objectives, the U.S. actions proved relatively ineffective. In fact, Athena modeling results indicated a decline in influence that was nearly identical to that seen in insight #1. Athena modeling showed that employing preemptive messaging techniques was ineffective when seeking to address Russian messaging campaign tactics.
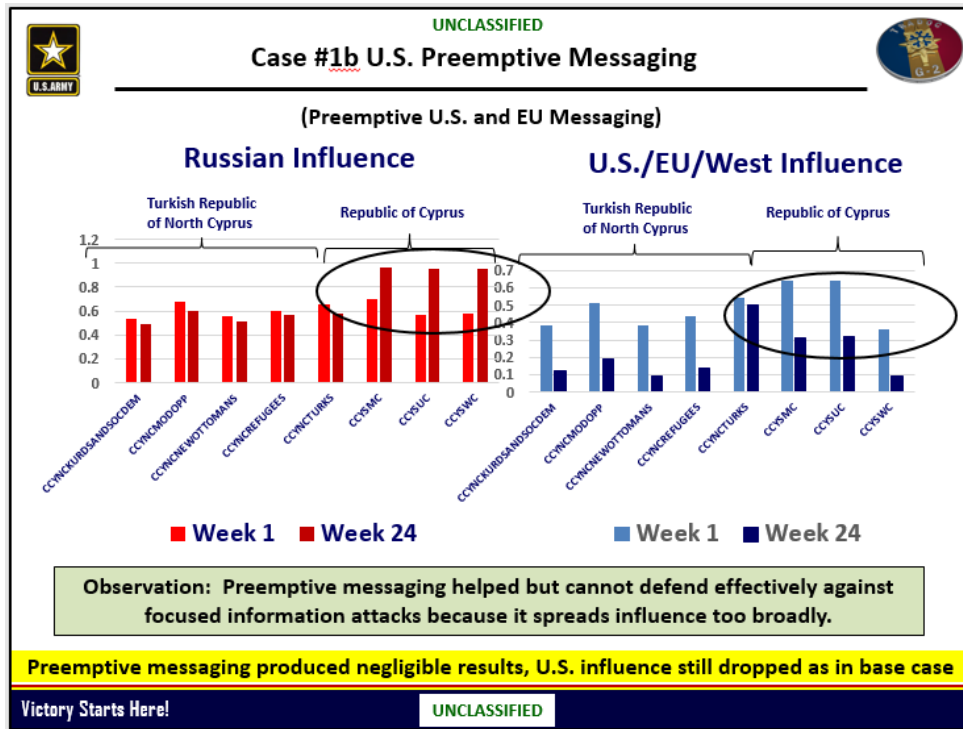
Figure #11. Preemptive U.S. Messaging

What did show a strong positive effect was when the U.S. and EU used immediate counter-messaging in response to Russian messaging campaign tactics. An aggressive and rapid response to Russian information actions resulted in significantly better success.

In Athena, using preemptory messaging requires that right informational payload(s) be delivered to the right audiences by the right perceived senders at the right times and methods. This technique requires the U.S. and EU to be extremely thorough in their research of Russia and its proxy strategies in Cyprus. So while the U.S. and EU might be first with the right message (using preemptory messaging), it is essential they distribute these messages effectively and accompany such messaging with actions. Additionally given only a limited amount of capacity to deliver messages, U.S. and EU information operations resources may be spread too thin trying to preempt every possible message to be delivered by Russia and its proxies. This then may require less specific broadly stated, "wave-top" messages to be generated, which might invite aggressive Russian counter-messaging. These wave-top messages need to contain specific tangible claims and be accompanied by appropriate reinforcing actions.

In this scenario, Athena modeling of the effect of U.S. preemptive messaging is shown to be negligible in both the Turkish Republic of North Cyprus and the Republic of Cyprus. In both instances, Russian influence increases while the U.S. and EU lose influence. This is particularly seen in the Republic of Cyprus, as shown in Figure #11.

This modeling demonstrates that efforts should not be focused on attempting to preemptively unhinge Russian messaging objectives, but rather on responding immediately to Russian information actions through the use of aggressive and rapid counter-messaging as discussed in insight #1, above.

Insight #3. Even with immediate U.S. counter-messaging, influence can be lost by allowing Russia to frame issues in the media first.

Description. In all use cases modeled, Russian messaging campaigns resulted in a decrease in U.S. and EU influence. Even with immediate U.S. counter-messaging, up to 24% of U.S. and EU influence can be lost by allowing Russia to frame issues in the media first. Nonetheless, modeling did show that the most effective way to mitigate the decline in influence is with immediate counter-messaging as shown in Figure #12.

Discussion. Although preemptive messaging does not significantly improve influence and the failure to respond in a timely manner with counter-messaging results in a steep decline in influence, Athena modeling shows that there is a positive effect when using immediate, reactive and positive messaging. When the U.S. responds to Russian Federation messaging quickly and positively, there is a 40% less drop in influence in both the Turkish Republic of North Cyprus and the Republic of Cyprus. Nonetheless, even with the counter-messaging, some U.S. and EU influence was lost (between 10-24%).
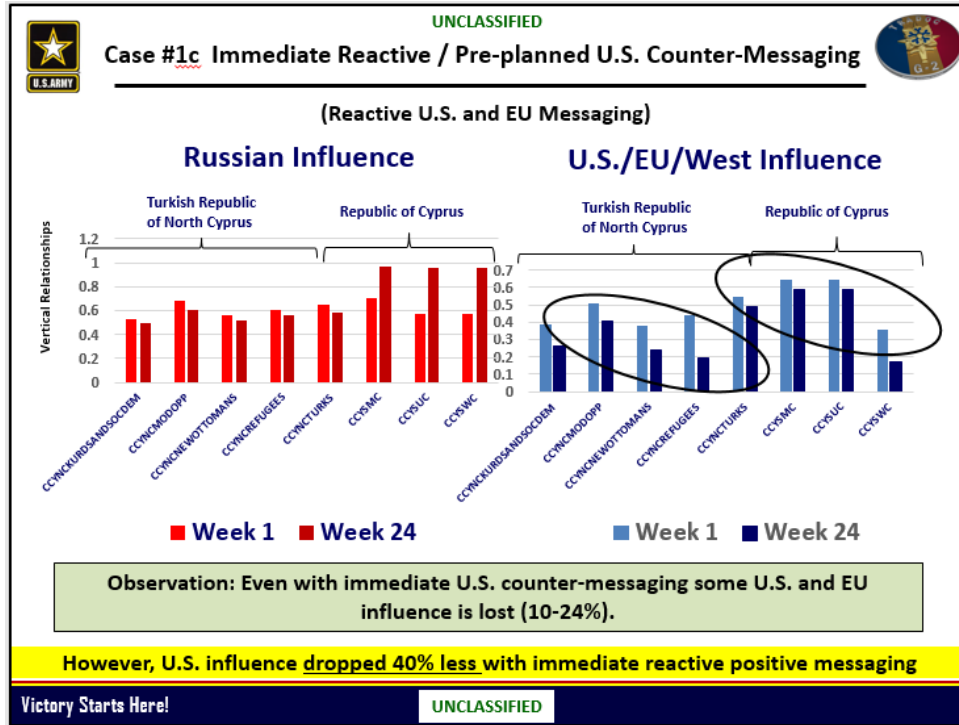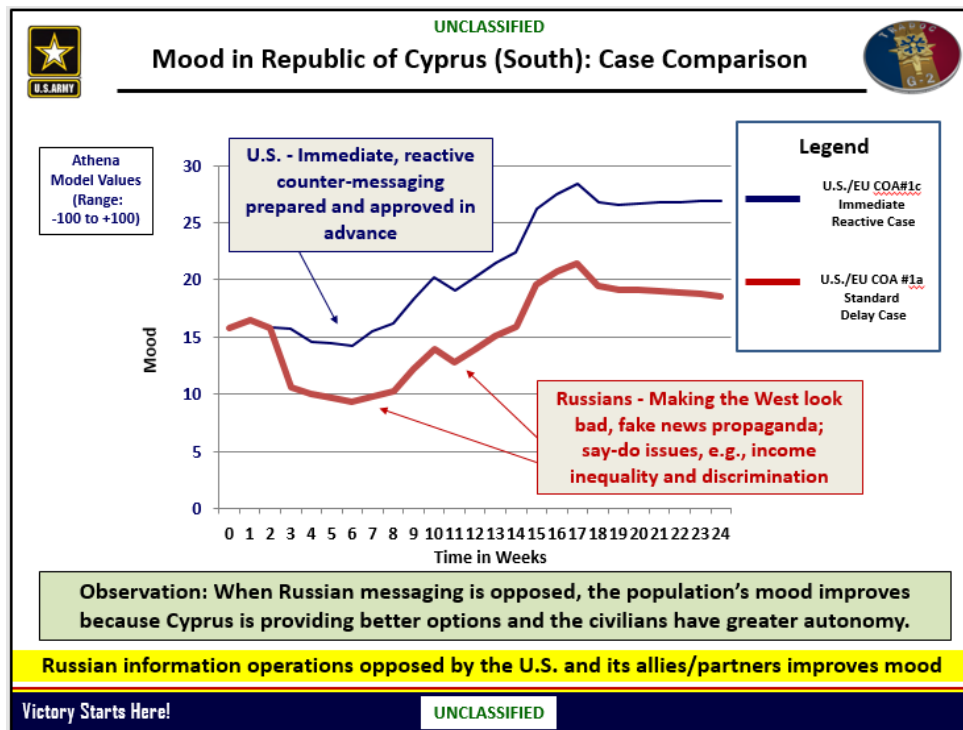
Figure #12. Immediate U.S. and EU Counter-Messaging

In addition, modeling indicates that Russian information operations that are opposed by the U.S. and its allies and partners improves the mood (satisfaction[7]) of the local noncombatant populations in both use cases (immediate reactive case and standard delay case). However, in the immediate reactive case, there is a significantly greater impact on improving the civilian population's mood. When information operations by Russia are opposed, the population's mood improves because the hedging strategy* employed by the Republic of Cyprus improves options for the people and they feel they have a greater level of autonomy.

  * The Republic of Cyprus does not want to place all of its future into U.S. and EU hands. They want self-reliance (the majority want the Republic of Cyprus to be strong, prosperous, and at least for now to remain independent). The people of the Republic of Cyprus want to be in the driver's seat, so a "hedging strategy" is their objective. They want the right to be a flexible partner with whomever they choose, Russia, the U.S., Greece, even China. Hedging is "a purposeful act in which a state seeks to ensure its long term interests by placing its policy bets on multiple countering options that are designed to offset risks embedded in the international

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[7] In Athena, a population's level of satisfaction or "mood" is a measure reflecting four human factors that are internally computed. These are composed of four factors: autonomy (governance), quality of life, safety & culture.

systems. The objective of hedging is to cultivate a middle position that forestalls or avoids having to choose one side at the obvious expense of another."[8]

Figure #13. Immediate U.S. and EU Counter-Messaging Improves Population Mood

In order to facilitate better results on U.S. and EU influence, immediate positive responses to Russian messaging are most helpful. Modeling showed that preplanned actions (that are approved and ready for execution) to support a more responsive and active counter-messaging strategy improved U.S. results in the region. As seen in Figure #13, messaging prepared and approved in advance allows the fastest response to Russian messaging and results in the greatest increase in the population's mood. U.S. responses, particularly when coupled with supporting actions (e.g., civil-military operations, cyber operations, the introduction of special operations forces, support for essential services and/or infrastructure development) are most effective.

Insight #4. Despite messaging tactics employed, local civilian populations are most likely to align with and support the regional actors with whom they have the most commonality of beliefs.

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[8] Hedging has been defined by Tran, Vierira and Ferreira—Pereira (Phuc Thi Tran, Alena Vysotskaya G Vieira and Laura C. Ferreira-Pereira, 'Vietnam's strategic hedging vis-a-vis China: the roles of the European Union and Russia', Revista Brasileira de Politíca Internacional, 56/1 (2013), 170, in ProQuest Central [online database].

Description. Although the U.S. and Russian Federation employed messaging campaign tactics to sway the populace, local civilian populations are most likely to respond favorably to, continue to align with, and support the regional actors and forces with whom they have the most commonality of beliefs.

Discussion. Even in complex messaging campaigns, it is difficult to overcome the civilian population's inclination towards specific actors. Based on underlying beliefs and regional fault lines, when civilians are predisposed to align against and dislike the U.S., they remain inclined to do so. This is equally true for civilian populations who align against and dislike the Russian Federation. In these cases, it appears there is little that can be done to overcome these civilian predispositions. Athena modeling indicates that a predisposed civilian population could be "flipped" to like/support the opposing side but this is generally only possible over a prolonged period of time.

Therefore, civilian groups that do not care for U.S. and EU actors and/or forces (i.e., have a non-commonality of belief system) are more likely to disregard U.S. messaging efforts while civilian groups that do not like Russia will likely not be swayed by Russian tactics.
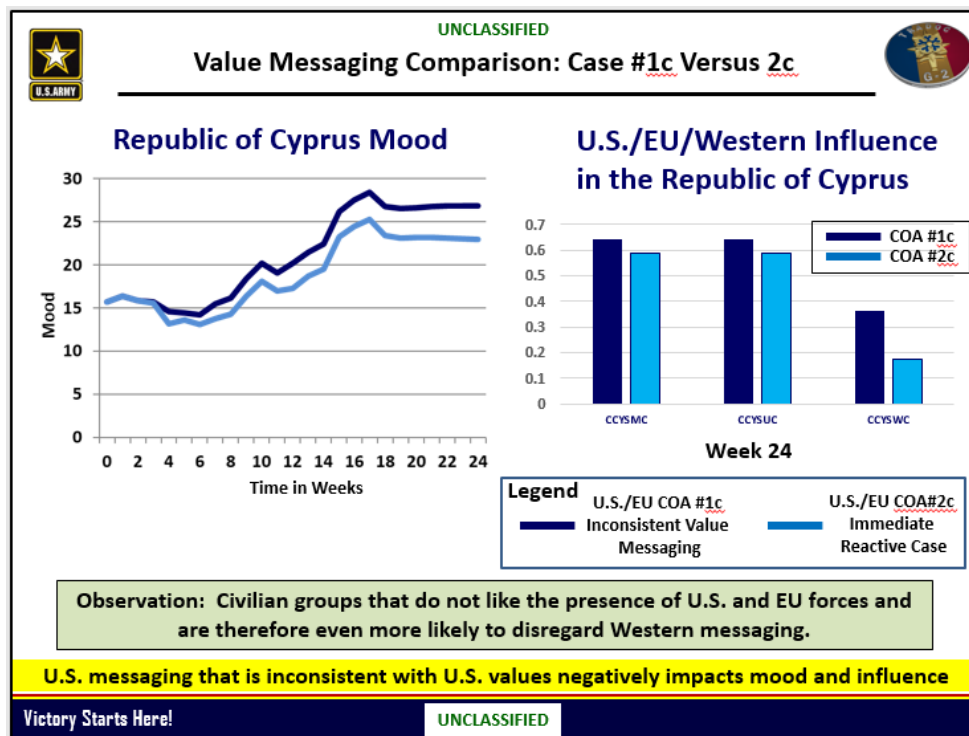

Figure #14. Inconsistent Value Messaging

Resistance to change occurs because there are risks supporting a different actor. The civilian population of Cyprus may already be familiar with the current actors and their practices. In Athena, the strength of the relationship is the same as the initial relationship

modeled in the baseline. The strength of that relationship is computed based on the beliefs modeled in Athena which may well reflect sociocultural dynamics that may have developed over time, perhaps even decades or centuries. Messaging in Athena, however, creates only transient effects that need to be sustained over time otherwise when the on-going transient effects cease, the civilian population satisfaction curves will bounce back to their natural levels. This explains why various civilian groups are most likely to respond favorably to and continue to align with and support the regional actors and forces with whom they have the most commonality of beliefs.

Athena modeling showed that U.S. messages that are inconsistent with U.S. values negatively impact the mood of the people of the Republic of Cyprus and decrease U.S. influence in the region. Therefore, the U.S. should primarily focus on a messaging campaign that utilizes belief-based themes that resonate with the civilian populations and which show consistency of their words and actions. Declines in influence and an increasingly negative mood occur when there is inconsistent values messaging as shown in Figure #14.

In both the Turkish Republic of North Cyprus and the Republic of Cyprus, Russian messaging sent during periods of heightened Russian domestic instability are less effective or not regarded by the Cypriots. Russian influence is clearly more effective across nearly every sub-group of the civilian population during periods when Russia is domestically stable. When Russia is domestically unstable, influence is cut approximately in half.

Chapter 3: Conclusions

The Athena Simulation was utilized to computationally model the effects of joint operations in the information environment and assess the impact of those actions on local civilian populations and regional stability dynamics. Results of this Athena modeling provided insights that informed the development of conclusions which have been aligned with the four primary study topics.

Overarching Conclusion. Support for the U.S. and its allies and partners in the South China Sea and Eastern Mediterranean regions relies on messaging relevance, timeliness, honesty, and the demonstration of appropriate actions to accompany its messaging campaign.

Conclusions by Study Topics

Study Topic #1. Messaging Integrity. Assess how populations are influenced by messaging and actions that reflect U.S. values.

Civilian populations respond favorably to integrity and consistency in messaging accompanied by actions that align with U.S. values and character. When the U.S. uses positive, values-based messaging it is generally more effective and persuasive.

- Civilian populations respond favorably to integrity and consistency in messaging accompanied by actions that align with U.S. values and character.

- Positive messaging is a more effective form of persuasive communication.

- Aggressive and rapid counter-messaging is demonstrably superior to slower responses indicating the need to streamline U.S. coordination and approval requirements.

- Preemptive messaging is generally ineffective because it may be seen as speculation and generally lacks enough specific details to be trusted.

Study Topic #2. Perceived Domestic Stability. Assess how incidents of domestic instability and civil disorder undermine Chinese and/or Russian ability to contest U.S. influence in international spaces.

Civilian populations lose trust and confidence in the great powers (U.S., China, Russia) when those governments are unwilling to admit their domestic weaknesses or social instabilities. The perception of instability and disorder affects the great powers' level of

strategic influence within the international community at least as much as their active messaging campaigns.

- The Chinese and/or Russian unwillingness to admit their domestic weaknesses demonstrates their lack of trustworthiness and decreases their credibility.

- When one of the great powers candidly addresses its domestic instability, it mitigates the inherent lack of trust felt by many populations.

- The autocratic natures of China and Russia account for their inability to address internal equality, while their past vs. future orientation promotes status quo hierarchy norms of indirectness/ritual/"face".

- The incidents of domestic instability and civil disorder in Russia can be used as examples of why Russia is so disliked globally.

Study Topic #3. Use of Proxies. Assess how the effectiveness of U.S. messaging is impacted when it is communicated through third parties or proxies.

The use of proxies to present a message is generally ineffective unless the proxy is well regarded by the target population. Proxies that are well accepted and integrated within the local population have less of a requirement to accompany their words with actions. Messaging by the great powers, when passed by a proxy whose messaging style and relationship to the target population are accepted, can have a positive impact on that power's regional influence objectives.

- The use of proxies is generally ineffective unless the proxy is well regarded by the target population. Therefore, there needs to be a good fit with acceptability by the target population, an actor's communications objectives and the proxy's messaging style.

- The use of proxies can be effective but only if nuanced carefully. Messaging through third parties or proxies can be a more effective means of communication than when the U.S. communicates directly with many target populations.

- If the proxy has a strong positive relationship with the population (e.g., a local figure) then employing a proxy usually works out fine. Similarly, if a great power chooses a proxy to deliver its messages and the proxy is disliked by the local population then the message, even if credible, will likely have a less positive impact or even a negative outcome.

Study Topic #4. Relevancy of Messaging. Assess how the effectiveness of messaging is impacted when it is oriented on issues of significance to the local noncombatant populations.

Messaging that is generally irrelevant to local civilian populations does not resonate as well as that which addresses issues of significance. Relevant messaging builds trust and creates a desire in the audience to return for increasingly more information, meaning that messaging of this nature is significantly more likely to obtain the sender's desired reaction, action, and response from the target audience.

- Messages relevant to the target audience are significantly more likely to obtain the sender's desired reaction, action, and/or response from the audience.

- Relevant messaging builds trust and encourages the audience to return for increasingly more information engagements.

- Irrelevant messages do not resonate as well as issues of significance to the local civilian populations. Audiences do not return to that source for information but will look elsewhere.

- Messaging that focuses on topics of interest to a local population's concerns are more effective than messaging that seeks to simply highlight the power and significance of a great power competitor.

Annex A. Net Assessment Explorable Insights

The Athena Simulation's role in the IIJO Project was to computationally assess several of the explorable insights (hypotheses) identified during the Net Assessment. A total of 35 explorable insights were identified by SMEs during this process. These lists of explorable insights was consolidated and used to develop the Athena Study Topics from which the study objectives were derived.

Net Assessment Process. The Net Assessment formed four SME teams with discussion objectives and an orienting question to facilitate the development of a series of explorable insights (hypotheses). Each team worked independently and their separate lists were consolidated and renumbered below.

> Team #1. Strategy, Motive and Intent // Team #1 derived 16 explorable insights derived from the following focusing question: Do U.S. interests (motives and intent), and the way we pursue these, put the U.S. at comparative disadvantage to Chinese and Russian efforts to satisfy their own interests?

> Team #2. Development and Transmission // Team #2 derived four explorable insights derived from the following focusing question: Are the actors' messaging and external communication development and transmission processes likely to produce effective communication (i.e., elicit an intended and desired response in an audience)?

> Team #3. Exogenous Factors // Team #3 derived four explorable insights derived from the following focusing question: Is the effectiveness of U.S. persuasive communication advantaged or disadvantaged relative to Russia and China by exogenous, contextual factors outside of its control?

> Team #4. Development and Transmission // Team #4 derived four explorable insights derived from the following focusing question: Are U.S.- Russian-Chinese messages effectively competitive?

Consolidated List of Explorable Insights (Hypotheses)

Team #1: Strategy, Motive and Intent

1. Team #1 // Hypothesis 1: Abruptly shifting and polarized internal political priorities in the U.S. (in pursuit of internal political power) have delegitimized-undermined U.S. abilities to contest Chinese/Russian influence in international spaces of competing interests.

2. Team #1 // Hypothesis 2: The historical legacies of U.S. world dominance have vitiated its effective claim to global leadership, beyond narrow, mutual self-interest.

3. Team #1 // Hypothesis 3: Domestic stability is essential for effective communication. (U.S. domestic instability and civil disorder have undermined U.S. abilities to contest Chinese/Russian influence in international spaces of competing interests.)

4. Team #1 // Hypothesis 4: The U.S. tendency to lead with values (make the world safe for democracy, people in other countries want to be like us, our system of government represents the most evolved and just political structure, i.e., the messianic mission) impedes U.S. ability to communicate in ways that enhance its influence.

5. Team #1 // Hypothesis 4A: The example that the U.S. sets is more important than the messages released. Not necessarily about policy and coordinated efforts. The U.S. sends messages whether it is intending to or not.

6. Team #1 // Hypothesis 4B: U.S. allies are a source of strength and credibility for U.S. messages.

7. Team #1 // Hypothesis 4C: The disconnect between words and deeds uniquely disadvantages the U.S. because of our democratic value system.

8. Team #1 // Hypothesis 5: Chinese domestic instability and civil disorder undermine Chinese abilities to contest U.S./Russian influence in international spaces of competing interests.

9. Team #1 // Hypothesis 5A: China is committed to their messages by any means necessary.

10. Team #1 // Hypothesis 5B: China believes that domestic instability and civil disorder undermine its narrative.

11. Team #1 // Hypothesis 6: China's pragmatic, long-term (as opposed to ideological) approach to other states is more likely to be effective.

12. Team #1 // Hypothesis 7: Russian domestic instability and civil disorder undermined Russian abilities to contest U.S./Chinese influence in international spaces of competing interests.

13. Team #1 // Hypothesis 7A: Russia's use of its military as a way to increase (inflate) its influence in Europe is effective.

14. Team #1 // Hypothesis 7B: Russia's primary motive for disinformation campaigns is to weaken perceived governing legitimacy among civilian populations in adversary states.

15. Team #1 // Hypothesis 8: Authoritarian systems have an inherent advantage in generating effective communications campaigns.

16. Team #1 // Hypothesis 9: A history of humiliation and injury has emotional draw that is attractive to other audiences and advantages China and Russia in the competition for influence with the U.S.

17. Team #1 // Hypothesis 10: Russia and China are more adept than the U.S. at choreographing dramatic but low risk activities that clearly communicate their power and world importance to international audiences ("strategic/ aggressive ceremony").

18. Team #1 // Hypothesis 11: U.S. interests in increasing international influence are well supported by and consistent with its national objectives, security strategy and international Information Environment (IE) activities.

19. Team #1 // Hypothesis 12: Russian interest in increasing international influence are well supported by/ consistent with its national objectives, security strategy and international IE activities.

20. Team #1 // Hypothesis 13: The Peoples Republic of China (PRC) interest in increasing international influence are well supported by/ consistent with its national objectives, security strategy and international IE activities.

21. Team #1 // Hypothesis 14: Networked knowledge and the virtual information environment in which it exists form a highly maneuverable "battlespace" which is a "center of gravity" for policy makers and warfighters of the three principals of interest (U.S., Russia, PRC); interacting together they emerge both visible and invisible influence characteristics that directly and indirectly reflect Actor motives and intents.

22. Team #1 // Hypothesis 15: The OIE Maneuver Space in which the three principals (U.S., Russia, PRC) interact constructs a coevolving environment consisting of constantly shifting policy objectives and techniques that drive motive and intent of

the principals in ways the principals can rarely reliably predict; "prediction" may be futile.

23. Team #1 // Hypothesis 16: The ways that the U.S. tends to conceive of "information" and the "information environment" as one among many sources of power, and a separate domain respectively puts it at a disadvantage in a coevolving, networked system.

Team #2: Development and Transmission

24. Team #2 // Hypothesis A: Existing bureaucratic structures and processes, and the incentive structures they create, prevent the U.S. from competing effectively and exploiting adversary errors in the IE.

25. Team #2 // Hypothesis B: Greater PRC and Russian Federation structural and procedural efficiency, enable faster, more unified, planning and execution than the U.S. can achieve. However, the speed of PRC and Russian Federation communication responses, and their lack of debate and discussion can limit long-term effectiveness and increase errors in judgement and execution.

26. Team #2 // Hypothesis C: Effective SC/IO requires advanced planning and a deeper integration with the future operations process.

27. Team #2 // Hypothesis D: The U.S. Government places insufficient emphasis on training, education and professional development to meet its SC needs. Without a whole of government education and training effort, the U.S. will lack sufficient analysis, planning, and operations capabilities to engage in long-term, information-dense, highly complex great power rivalries.

Team #3: Exogenous Factors

28. Team #3 // Hypothesis A: Attacking or criticizing adversary messaging is one of the least effective approaches the U.S. can take in response to exogenous shocks. Positive and proactive messaging is more important in U.S. persuasive communication.

29. Team #3 // Hypothesis B: The historical US ability to exert soft power to establish norms in light of exogenous factors yielded a comparative advantage over Russia and China. However, this U.S. advantage may be diminishing.

30. Team #3 // Hypothesis C: The nature of U.S. communication infrastructure provides a vast attack surface for adversaries to bombard the US population with rapid-fire, multi-vectored influence operations. Conversely, the rise of "splinternets" will enable U.S. adversaries to isolate their populations, limiting the efficacy and penetration of U.S. information operations and narratives.

31. Team #3 // Hypothesis D: Adversaries' comparatively greater focus on crafting state narratives allows them to more easily implement an advantageous strategic communication response to exogenous shocks that both effectively targets and segments the audience (Russia) and reflects their existing state narrative (China, Russia). At the same time, the U.S. narrative development task may be fundamentally harder.

Team #4: Development and Transmission

32. Team #4 // Hypothesis One: By 2031, in the information theater of the national security competition, China will have clearly surpassed both the United States in capability and Russia in boldness and activity level, which will be reflected in messaging content. The combination of these trends will place China as the world's preeminent, although not quite hegemonic, actor in this competition.

33. Team #4 // Hypothesis Two: As U.S. social media and IT technology giants continue to pursue global markets in China despite that nation's autocratic policies of censorship, surveillance, and control, incorporating these same technologies in U.S. markets will suppress U.S. freedom of speech by creating a digital panoptic of political and cultural over watch, censorship, and self-censorship. This will further result in foreign adversaries' exploitation of US social media and related technologies to undermine U.S. DoD and DoS great power competition narratives making them less confrontational.

34. Team #4 // Hypothesis Three: Most of the strategic balance between principals (U.S., China, Russia) in message competition in swing states relates to the perceived domestic success of those principals, not their active messaging. Information operations have an important marginal role, but it is usually at the margin.

35. Team #4 // Hypothesis Four: Media messages that disrupt common values are more likely to elicit effects than messages attempting to build constructive cooperation.

Annex B. Questions Architecture

The primary Athena study question and supporting questions architecture were based on the five overarching SMA research questions and the four Study Topics derived from the explorable insights (hypotheses) developed during the Net Assessment. From these topics the study objectives were identified all of which are primarily centered on how U.S. Joint Forces can more effectively use information to set conditions for regional stability and success.

IIJO Project - Study Questions. SMA will address five primary study questions:

1. How are state and non-state actors operating in the information environment, and what can be learned from their approaches? How might this be used to inform joint force strategy and planning approaches?

2. What are suitable Operations in the Information Environment assessment frameworks and approaches?

3. What are key escalation thresholds in the information environment for priority National Defense Strategy/National Military Strategy adversaries?

4. What are relevant insights from private sector firms and non-governmental organizations on affecting perceptions and behavior on macro, meso, and microscales?

5. The orientation to leading with information represents a significant culture change for the Joint Force. How have non-Department of Defense institutions handled such organizational change?

Derived Study Topics. Four study topics were derived from the full set of explorable insights (hypotheses) postulated during the Net Assessment

1. Messaging Integrity. The example the U.S. sets is more impactful than the messages being released. Positive and proactive messaging is a more effective form of persuasive communication which needs to be coupled with actions that align with U.S. values and character.

2. Perceived Domestic Stability. The perception of instability and disorder affect the great powers' level of strategic influence in the international community more than their active messaging campaigns.

3. Use of Proxies. Messaging through third parties or proxies can be a more effective means of communication than when the U.S. communicates directly with many target populations.

4. Relevancy of Messaging. Messaging that focuses on topics of interest to a local population's concerns may be more effective than messaging that seeks to simply highlights the power and significance of a great power competitor.

Athena Study Question: How can U.S. joint forces be prepared and empowered to more effectively conduct Operations in the Information Environment?

Objective 1.0 – Determine how the communication of U.S. values can mitigate the effectiveness of adversary messaging during great power competition.

Issue 1.1 – What U.S. values are most likely to resonate with noncombatant populations?

EEA 1.1.1 – What U.S. values most resonate with and influence noncombatant populations in the Philippines?

EEA 1.1.2 – What U.S. values most resonate with and influence noncombatant populations in Cyprus?

Issue 1.2 – How might a key regional actor counter or disrupt a U.S. values messaging campaign?

EEA 1.2.1 – How might China counter a U.S. values messaging campaign?

EEA 1.2.2 – How might Russia counter a U.S. values messaging campaign?

Issue 1.3 – How do supporting actions by the U.S. impact the effectiveness of a U.S. values messaging campaign?

EEA 1.3.1 – How effective is a U.S. values messaging campaign when not paired with any reinforcing actions?

EEA 1.3.2 – How effective is a U.S. values messaging campaign when it is paired with supplementary supporting actions?

Objective 2.0 – Explore how the perception of a key regional actor's domestic stability can influence the opinion of local noncombatant populations.

Issue 2.1 – What measures of domestic stability most influence the credibility of the messaging?

EEA 2.1.1 – What measures of internal domestic stability in China most influence the relationship between China and noncombatant populations in the Philippines?

EEA 2.1.2 – What measures of internal domestic stability in Russia most influence the relationship between Russia and the noncombatant populations on Cyprus?

Issue 2.2 – How does domestic stability in countries engaged in great power competition impact the credibility of their messaging?

EEA 2.2.1 – How does the perception of Chinese domestic stability affect the relationship between China and noncombatant populations in the Philippines?

EEA 2.2.2 – How does the perception of Russian domestic stability affect the relationship between Russia and the noncombatant populations in Cyprus?

EEA 2.2.3 – How does the perception of U.S. domestic stability affect the relationship between the U.S. and the noncombatant populations in the Philippines?

EEA 2.2.4 – How does the perception of U.S. domestic stability affect the relationship between the U.S. and the noncombatant populations in Cyprus?

EEA 2.2.5 – How does the perception of U.S. domestic stability affect the relationship between the China and noncombatant populations in the Philippines?

EEA 2.2.6 – How does the perception of U.S. domestic stability affect the relationship between Russia and noncombatant populations in Cyprus?

Objective 3.0 – Explore how the use of proxies can influence the effectiveness of a key regional actor's messaging campaign.

Issue 3.1 – How is the effectiveness of a key regional actor's messaging campaign affected by the perception of who is generating the message?

EEA 3.1.1 – How do noncombatant populations in the Philippines respond if they believe a message is coming from a Chinese source verses that of a proxy?

EEA 3.1.2 – How do noncombatant populations in Cyprus respond if they believe a message is coming from a Russian source versus that of a proxy?

Issue 3.2 – How is the effectiveness of a key regional actor's messaging campaign affected if it is discovered that a proxy is being used to disguise the true source of the message?

EEA 3.2.1 – How do noncombatant populations in the Philippines respond if they believe a message from a neutral source is actually coming from a Chinese source?

EEA 3.2.2 – How do noncombatant populations in Cyprus respond if they believe a message from a neutral source is actually coming from a Russian source?

Objective 4.0 – Determine how the local support for a key regional actor is affected by messaging that is oriented on issues that are generally insignificant to the local noncombatant population.

Issue 4.1 – What is the effect on local noncombatant populations when messaging simply highlights the significance of a key regional actor without showing a value linkage to that population?

EEA 4.1.1 – How do noncombatant populations in the Philippines respond to a messaging campaign that only highlights Chinese culture and greatness?

EEA 4.1.2 – How do noncombatant populations in the Philippines respond to a messaging campaign that addresses issues of importance to those local civilian populations?

EEA 4.1.3 – How do noncombatant populations in Cyprus respond to a messaging campaign that only highlights Russian culture and greatness?

EEA 4.1.4 – How do noncombatant populations in Cyprus respond to a messaging campaign that addresses issues of importance to those local civilian populations?

Issue 4.2 – How does decomposing messages into discrete sub-elements for specific audiences make those messages more effective?

EEA 4.2.1 – How do noncombatant populations in the Philippines respond to a Chinese messaging campaign that tailors its messages to address specific regional and local audiences and/or issues?

EEA 4.2.2 – How do noncombatant populations in Cyprus respond to a Russian messaging campaign that tailors its messages to address specific regional and local audiences and/or issues?

Annex C. Athena Simulation Description

The Athena Simulation. Athena is a sociocultural modeling capability which supports a decision maker by providing both a framework to better understand complex PMESII based problems and a simulation for assessing the long-term consequences of engagement choices across the totality of the operational environment.

Athena Simulation Description. Athena is a scalable, single user, laptop-based, course of action development and analysis capability used to anticipate the consequences of force activities on noncombatant groups. Athena enables the analysis of second and third order effects upon civilian groups and those group's possible responses in order to discern potential outcomes from political, military, economic and social interventions. Athena allows leaders and analysts to understand the intended and unintended consequences of their proposed actions through a simulation process that incorporates social science 'universals' into course of action analysis and campaign planning. It enables the examination of interdependent political, economic, security/military, and information dynamics; anticipation of emergent actors, factions, and powerbases; and compares and contrasts multiple courses of action.

Principles Underpinning Athena. Fundamental human behavior universals recognized by social science form the foundation of the Athena design. These include: 1) cultural narrative, i.e., a person or group's belief in their origin, purpose and destiny, of which there are hybrids or blends, and from which social institutions, organizations and governments evolve; 2) relationships, the concept that human behavior is shaped in part by the relationships we form, e.g., kinship, trade-craft, bureaucratic, patronage and so on; and 3) utility theory, the concept that all people conduct internal cost/benefit analyses to assess the potential impact of proposed actions and decisions. These social science universals are then used by Athena to define the satisfaction or mood of the various population groups within the system.

The Athena simulation is designed to be culturally agnostic, i.e., to generate results which will allow the system to be applicable anywhere in the world. To accomplish this, the social science universals are mapped into Athena group satisfaction vis-à-vis four common concerns. The four concerns are: 1) autonomy with respect to governance, i.e., the group's satisfaction or dissatisfaction with extant governance and/or a group's ability to influence governance; 2) quality of life, i.e., whether the actor or group is satisfied or dissatisfied with their life conditions which include things like employment, healthcare, infrastructure, education, availability of food and water, etc.; 3) culture, i.e., whether one's sacred sites, artifacts, traditions and taboos are respected or denigrated; and 4) safety, i.e., whether the individual or group feels secure in their environment and to what extent. Each of the four concerns is assigned a relevant saliency differentiating between one

group and another, what is the most important concern and weighting that appropriately. The four concerns together translate into a group mood weighted by the group's saliency for each concern. The concerns are a representation of how much a group desires change based on impact on those concerns.

Internal Computational Complexity. The true strength of Athena is found in its internal composition and computational linkages. Athena is composed of six primary embedded and interrelated, internal models: Political, Economic, Social, Information, Demographics, and Ground. During each one week time step, the internal models compute change dynamics and then shares those results with other internal models initiating additional computational processes. Once the computational dynamics reach their nominal stopping point, change trends for that time step are logged along with a set of all the rules that fired to generate the result occurring at that moment in time and the trend lines that it generated.

Athena uses force activity effects and the effects of other DIME-FIL interventions to assess change over time across noncombatant populations in terms of relationships; volatility and stability; support, influence, and control; and mood and attitude. The Athena Simulation enables leader assessments of political, economic, and social stability at the sub-national, nation-state, or regional level by considering PMESII-PT trends over multi-year periods.

Synopsis of Key Athena Concepts and Terms. Definitions for several key Athena concepts and terms are provided below.

- Neighborhood. Neighborhoods define geographic regions within the Athena playbox.

- Actors. Actors can be individuals, organizations, political parties, Violent Extremist Organizations (VEOs), or separate nations who are seeking to influence conditions within a neighborhood. Actors have resources that they can apply to an area causing them to gain or lose influence, and thereby shifting control within the neighborhood.

- Force Groups. The presence of military or security forces greatly influences the behavior, feelings of safety and security, and the mood of civilian groups. Force groups can span the full spectrum from official militaries and police, to paramilitary forces, to highly informal militias and terrorist cells. The presence of a force group allows an actor to increase the level of control they may have over a neighborhood.

- Civilian Groups. Another key element of the design of Athena is the use of civilian groups for defining the local populations. Civilian groups have belief systems and shift their support for various actors based on that belief system and the application of resources by an actor.

- Mood. Mood is the average of the four Athena common concerns (i.e., autonomy, culture, safety, and quality of life described above). Each concern is weighted by a group's saliency for each human factor. Mood is a convenient summary statistic that reflects the changing attitudes of various groups and is an input to a number of other internal Athena modeling areas.

- Volatility. Volatility is a measure that describes the level of stability within a neighborhood. The volatility determines how likely it is that a random person in the neighborhood will get caught up in violence unrelated to their presence; as such, it is a major component of a group's security in the neighborhood.

- Security. Security is a factor that has several similarities to volatility. It is a major driver for influencing changes to population moods and neighborhood stability. While volatility speaks about the possibility of spontaneous violence impacting an individual, security addresses both where (neighborhood) and who (civilian group) is affected by violence and instability.

- Support. Support is a measure of the strength of a population's relationship with an actor. Actors gain or lose influence and thus control of neighborhoods based on the level of support they have from groups. Actors can increase the level of support they receive by expending resources in a neighborhood on a group. The ability of an actor to maintain security by deploying security forces in a neighborhood can significantly increase the support from a group.

- Influence. Influence is a measure of an actor's ability to shape the behavior of populations in a neighborhood. It is based on the amount of support the actor has from the residents of the neighborhood relative to other actors.

- Control. Control simply defines who 'owns' or is responsible for each neighborhood. When actors are in control of a neighborhood, the residents of the neighborhood hold them accountable for dealing with the neighborhood's problems. The actor in control is blamed when things go poorly and given credit when things go well.

- Support – Influence – Control. Actors with sufficient support from the residents of a neighborhood have influence in that neighborhood. Given sufficient influence, they

may be able to take control of a neighborhood. If another actor has more influence than the previously controlling actor, and the new controlling actor loses influence, then no one is in control of that neighborhood.

For more information on the Athena Simulation please contact these individuals.

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Annex D. Belief Topics

Belief Systems. A key element of Athena modeling involves defining the primary belief systems in a region. These define both beliefs and significant fault lines that drive human behavior and which can potentially divide people groups.

South China Sea Database. This set of belief topics are essentially focused on the Philippines and seek to capture both the sense of nationalism that drives the civilian response to the government and the growing influence of China on regional stability.

Topic #1: Sons of Rizal. Broad appeal across most segments of Philippine society, especially among Christian Filipinos. Filipinos identify first with family, take pride in hospitality and friendliness as well as in the concept of Bayanihan (helping others in times of crisis) and "the debt of gratitude (utang na loob)." There is often a distrust of Moros, who are considered to be uneducated and violent.

Topic #2: A Peaceful People Seeking Their Proper Place under the Sun. The non-elite segments of the Muslim community on Mindanao tend to identify most strongly with family or clan. They feel the repeated failure to pass a Bangsamoro Basic Law, granting them autonomy, is evidence of continuing prejudice on the part of the central government, and of Christian Filipinos more generally. They also distrust the widespread corruption in not only the central government, but in the offices of the Moro National Liberation Front (MNLF, whose leadership is dominated by Tausug) and the Moro Islamic Liberation Front (MILF, whose leadership is dominated by the Maguindanao).

Topic #3: Independent Islamic State, Glory to the Caliphate. Appeals to a relatively small group of radicalized fighters who believe they have a sacred duty to "fight the enemy at home" and drive kafir (non-believers) from Bangsamoro, the land of the Moros.

Topic #4: No More Trapos. A belief held by many conservative populists and which appeals to many non-elite Muslims in Mindanao. The Philippines is again in the hands of a resurgent oligarchy, fronted by the trapos (traditional politicians). Only Rodrigo "Rody" Roa Duterte, or "Digong," can be trusted to bring the rampant crime and drug violence under control, restore crumbling infrastructure, flush out the corrupt and fire the incompetent. Only Duterte, half Moro himself and from Mindanao, can be counted on the pass the Bangsamoro Basic Law (a promise made by candidate Duterte, and repeated by President Duterte during the siege of Marawi).

Topic #5: Liberal Statists. Widely held among social liberals and liberal democrats. The problems in Mindanao have to do with the unequal distribution of land and wealth, as well as a failure of the state to provide "guaranteed property security." An equitable land

redistribution deal is necessary, as well as the state destruction of "entrepreneurs of violence".

Topic #6: <u>Encroaching China</u>. For centuries, the Filipino and Chinese people coexisted peacefully. However, in 1995, China began making aggressive attempts to claim Philippine territory in the West Philippine Sea. The Philippines must turn to the international community and forge stronger defense ties to other nations — including the United States — to end China's bullying and protect its sovereignty.

Topic #7: <u>China's Corrupting Influence</u>. The government of China is corrupt and Chinese influence is leading to increased corruption in the Filipino government. China has portrayed itself as a benevolent neighbor to the Philippines, but scandals involving Chinese firms have shown China's true intentions to exploit the Philippines' resources and its people. Filipinos must remain wary of furthering ties to authoritarian China. Only through vigilance can Filipinos preserve their values, secure the country's prosperity, and prevent suffering at the hands of an outside power.

Topic #8: <u>Embracing the Dragon</u>. The Philippines has traditionally looked to the West for economic support but with Western countries now mired in their own scandals and economic crises, the Philippines must look to the East, where China has emerged as a global economic power. Through stronger ties to China, the Philippines can build its industry, create jobs for Filipino youth, and ensure a continued march toward prosperity.

Topic #9: <u>Between Big Powers</u>. Since 1995, China has repeatedly violated Filipinos' territorial rights and broken promises to peacefully resolve West Philippine Sea disputes. Some Filipinos advocate a stronger U.S.– Philippines defense alliance to counter China's aggression, but this would swap one big power for another and invite U.S. rule over the Philippines once again. Only though a diplomatic solution that avoids U.S. interference can the Philippines preserve its territory and promote peace in the region.

Topic #10: <u>Corrupt and Inefficient Government</u>. Rampant, gross inefficiency, graft, corruption, and poor economic policies across the spectrum of the government bureaucracy have increased the suffering of the poor while favoring the rich. Both urban and rural poverty is significant. Just as they did more than a generation ago under martial law, the poor disproportionately suffer military abuse and human rights violations; they face arrogant, indifferent public officials, and are slow to receive justice, though quick to be punished. The rich, and high-ranking officials, meanwhile, escape with no charges. Job-creating projects for the neediest, including roads, bridges, schools, houses, and irrigation, often stall due to corruption.

Eastern Mediterranean Database. This set of belief topics focus primarily on the behavior drivers or fault lines that exist between Turkey and Greece. These seek to capture both the sense of nationalism that drives the civilian response to their respective governments, the growing influence of Russia in the region, and the impact of two religions impacting regional stability. These belief topics were derived from research and master narratives information found in country reports developed by Monitor 360.

Topic #1: <u>Turkey the Injustice of Sèvres</u>. Western powers unjustly divided up the Turkish homeland after World War I in an effort to undermine Turkish influence and power. These malign intentions persist today. Given the opportunity, Western powers will use their might to undermine Turkey's security and unity. Turks must remain vigilant.

Topic #2: <u>Turkey the Arab Betrayal</u>. The Arabs stabbed Turkey in the back by revolting against the Ottomans during World War I. Arabs will betray Turkey again given the chance, so Turkey cannot rely on the friendship of Arab nations.

Topic #3: <u>Turkey the Deep State</u>. Turkish democracy is under threat from a "deep state," a secret and powerful unit of well-connected figures concentrated in the military. Turks must rally against these clandestine adversaries and support the brave legislative and judicial efforts to punish deep state plots to destroy Turkish democracy.

Topic #4: <u>Turkey Reclaiming the Ottoman Past</u>. Turkey has a long, illustrious history of power and greatness dating back to the Ottoman era. Turkey should look eastward to rekindle relations with former Ottoman nations and reassume its rightful place as a "bridge" between East and West.

Topic #5: <u>Turkey the Moderate Islam Project</u>. Turkey is threatened by a secret American effort to install U.S. friendly, "moderate" Islamic governments across the region. In Turkey, the U.S. is propping up the AKP (Adalet Ve Kalkinma Partisi [Turkish: Party for Justice and Progress]) for this end.

Topic #6: <u>Turkey Restoring the Kurdish Homeland</u>. Kurds have always lived on the land in southeastern Turkey. Today, Turks illegally occupy this historical homeland and trample upon the Kurdish community's identity. Kurds should reject assimilation in order to defend Kurdish cultural and linguistic heritage from extinction.

Topic #7: <u>Turkey Position on Greek Nationalism</u>. The Turkish people consider Greek nationalism as an agenda for energizing Greek-sponsored right-wing intolerance by organizations, political parties, and individuals all of which increases instability on Cyprus.

Topic #8: <u>Turkey and the NATO Allegiance</u>. NATO is a fundamental pillar of Turkish defense and security architecture.

Topic #9: <u>Greek Position on Austerity Measures and EU Allegiance</u>. Greek-EU austerity programs are an effort by the EU to impose limitations on Greece that are undermining Greece's historical positon as a leader in the region and weakening Greece's allegiance to the EU.

Topic #10: <u>Greece Needs to Prioritize Internal Problems First</u>. Greece needs to solve its internal economic and unemployment instability problems to avoid falling deeper into economic, social and political turmoil.

Topic #11: <u>Greece on a Divided Cyprus</u>. Greek-Cypriots prefer the continuation of the island's division rather than co-existence with the Turkish-Cypriots.

Topic #12: <u>Greece Needs to Curtail Illegal Immigration</u>. Greece should curtail illegal immigration and asylum management.

Topic #13: <u>Greece Should Expand its Role in Energy</u>. Greece should enlarge its role in managing international energy resources.

Topic #14: <u>The West has Betrayed Greece</u>. Greece has been economically betrayed by the West and should to turn to the East (Russia and China) to cultivate new investment opportunities.

Topic #15: <u>Growth in Chinese and Russian Influence in Greece is a Threat</u>. The Chinese and Russian presence and influence in Greece are growing steadily and lack any clear direction and planning on the Greek side.

Topic #16: <u>Greece is Eurasian Bridge</u>. Russia was founded as a mighty civilization that bridges East and West. The Soviet Empire stretched from the Baltic Sea to the Bering Strait, but its collapse left a void in a region that Russia is destined to lead. Russia must strengthen cultural, economic, and diplomatic ties to create a new regional union comparable in strength to other global powers. By fulfilling its destiny as an East-West bridge, Russia will shape the future of both the region and the world.

Annex E. Neighborhoods

Neighborhoods. In Athena, neighborhoods are the system for decomposing the study region (playbox) into manageable portions for analysis. The playbox can be broken down in various ways but most commonly is described based on governance.

South China Sea Database. For this study, the Philippines playbox has been decomposed into 18 neighborhoods (see Figure #1) which are configured along lines of governance (Regions). The naming convention aligns regions primarily with the major people groups found in each neighborhood.

1. National Capital Region (Manila)
2. Cordillera Administrative Region
3. Southwestern Tagalog (Mimaropa)
4. Negros Island Region
5. Davao City (Davao City Metropolitan Area excluding remainder of Davao del Sur)
6. Bangsamoro (Bangsamoro Autonomous Region in Muslim Mindanao)

7. Ilocos (Region I)
8. Cagayan Valley (Region II)
9. Central Luzon (Region III)
10. Southern Tagalog (Calabarzon) (Region IV)
11. Bicol Region (Region V)
12. Western Visayas (Region VI)
13. Central Visayas (Region VII)
14. Eastern Visayas (Region VIII)
15. Zamboanga Peninsula (Region IX)
16. Northern Mindanao (Region X)
17. Davao Region (Region XI)
18. Soccsksargen (Region (XII)
19. Caraga Region (Region XIII)

Eastern Mediterranean Database. For this study, the Eastern Mediterranean playbox has been decomposed into 22 neighborhoods (see Figure #2) which are associated with the three primary countries in the study: Turkey, Greece and Cyprus. The neighborhoods are configured along lines of governance with several smaller provinces being combined into larger neighborhood regions.

Cyprus
1. Northern Cyprus (Turkish Republic of North Cyprus)
2. South Cyprus (Republic of Cyprus)

Greece
3. Athens (National Capital)
4. Thessalonica
5. Aegean Islands
6. Central Greece
7. Crete
8. Epirus
9. Ionian Islands
10. Macedonia
11. Peloponnese
12. Thessaly
13. Thrace
14. Aegean

Turkey
15. Ankara (National Capital)
16. Istanbul City
17. Black Sea
18. Central Anatolia
19. Eastern Anatolia
20. Marmara
21. Mediterranean
22. Southeastern Anatolia

Annex F. Civilian Groups

Civilian Groups. A key element for understanding regional stability dynamics is the defining of the civilian groups that comprise the local noncombat populations. Civilian groups have belief systems and relationships with key actors which can be influenced by actors as they apply resources, generally forces, economics and/or messaging in a region. Understanding how a population's mood and satisfaction with its circumstances are influenced over time is a primary Athena output.

South China Sea Database

There 42 civilian groups in the South China Sea database (full list below) derived from several people groups found in the Philippines. Short description of the six primary people groups are provided below as well as a general list of the 42 civilian groups broken down by location and political leanings. With the exception of the Moros and indigenous groups, a majority of Filipinos are Roman Catholic, with a growing segment of Protestants.

People Groups (from which the full list of civilian groups is derived):

1. Tagalog. The Tagalog form the largest ethnic group in the Philippines. Indigenous to central Luzon, the Tagalog have spread to all the Philippine islands. Their language, also known as Tagalog, is the basis for the national language, Filipino, which also includes words from several of the Philippines' many ethnic groups.

2. Visayan. The Visayans are the second largest ethnic group in the Philippines, originating from the Visaya islands, between Luzon on the north and Mindanao on the south. Visayans have also spread throughout the islands.

3. Ilocano. The Ilocanos are the third largest ethnic group (if Cebuano, the largest Visayan group, are not counted separately) in the Philippines. Originating from the northwest portion of Luzon, the Ilocanos also have a presence throughout the island chain.

4. Moro. The Moros are a collective designation for several ethnic groups indigenous to Mindanao who are Muslim. The Moro have a long history of insurgency and a desire for either independence or autonomous rule in Mindanao. This desire

continues and may even be intensified since the Bangsamoro Organic Law[9] has only been partially effected since being passed in 2018.

5. <u>Manila American Expatriates</u>. American expatriates in the Philippines are estimated to number between 220,000 and 650,000 or more. Their presence exerts a cultural influence: The U.S. hosts more Filipinos than any other country outside of the Philippines, thus many Filipinos in the Philippines have family connections in America; many of the expatriates are U.S. military veterans and many American Expats work for major American companies which impacts business circles. Additionally, their presence reminds everyday Filipinos (not Duterte) that America is an attractive place, a rich place and a strong place, and that America is a treaty ally. This cultural connection, plus the importance of English as the Philippines' second language, and the sheer numbers of Filipinos working in the U.S., helps keep the average Filipino supporting the U.S.

6. <u>Manila Chinese Filipinos</u>. Ethnically, Chinese Filipinos make up less than two percent of the population, though they tend to be wealthy, controlling many large conglomerates in the country. There is a history of resentment towards wealthy, ethnically Chinese Filipinos in the Philippines (as there is throughout Southeast Asia towards ethnic Chinese populations). This resentment may be magnified by current tensions with China but there is no evidence of collusion between ethnic Chinese Filipinos and China.

The full list of civilian groups:
- Cordillera Ethnic Others Nationalists and Fiscal Conservatives
- Davao Ethnic Others Conservative Populists
- Manila American Expatriates
- Manila Chinese Filipinos
- Mawari City Refugees

- Bicol Tagalog Social Liberals
- Bicol Tagalog Conservative Populists
- South Tagalog Chinese Filipinos
- Central Luzon Tagalog Conservative Populists
- Central Luzon Tagalog Social Liberals
- Manila Tagalog Conservative Populists

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[9] The Bangsamoro Organic Law, Republic Act No. 11054, also known as the Bangsamoro Basic Law and by its full title as the "Organic Law for the Bangsamoro Autonomous Region in Muslim Mindanao", is a Philippine law which provides for the establishment of the autonomous political entity known as the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM).

- Manila Tagalog Social Liberals
- South Tagalog Conservative Populists
- South Tagalog Social Liberals
- Southwest Tagalog Conservative Populists
- Southwest Tagalog Social Liberals

- Bangsamoro Moro Islamic Quietist
- Bangsamoro Moro Islamic Separatists
- Caraga Moro Islamic Quietist
- Northern Mindanao Moro Islamic Quietists
- Northern Mindanao Moro Islamic Separatists
- Soccsksargen Moro Islamic Quietist
- Soccsksargen Moro Islamic Separatists
- Zamboanga Moro Islamic Quietist
- Zamboanga Moro Islamic Separatists

- Cagayan Ilocano Conservative Populists
- Cagayan Ilocano Nationalists and Fiscal Conservatives
- Cagayan Ilocano Social Liberals
- Ilocos Ilocano Conservative Populists
- Ilocos Ilocano Nationalists and Fiscal Conservatives
- Ilocos Ilocano Social Liberals

- Central Visayan Conservative Populists
- Central Visayan Social Liberals
- Central Visayan Liberal Democrats
- Eastern Visayan Conservative Populists
- Eastern Visayan Social Liberals
- Eastern Visayan Liberal Democrats
- Negros Visayan Conservative Populists
- Negros Visayan Social Liberals
- Negros Visayan Liberal Democrats
- Western Visayan Conservative Populists
- Western Visayan Social Liberals
- Western Visayan Liberal Democrats

Eastern Mediterranean Database.

There 86 civilian groups in the Eastern Mediterranean database (full list below) which are centered on several people groups found across the Eastern Mediterranean. Additionally, several civilian groups have been established based on economic status. Short descriptions of the eight primary people groups and/or economic designations are provided below as well as a general list of the 86 civilian groups broken down by location and political/economic leanings.

People Groups (from which the full list of civilian groups is derived):

1. <u>Kurds and Social Democrats</u>. This group is comprised of the Kurdish people in the region who have migrated to Greece mainly to escape persecution from Iraq but also from Southeastern Turkey. Social democrats are represented by the Social Democratic People's Party in Turkey, a center-left, secular political party.

2. <u>Moderate Opposition</u>. This group is primarily represented by the Republican People's Party in Turkey and by the Pan Hellenic Socialist Movement (PASOK) in Greece.

3. <u>New Ottomans</u>. New Ottomans are so-called for their desire to expand Turkey back to the grandiosity and status of the Ottoman Empire. President Erdogan has spoken of the modern borders being too small and the state-supporting media has shown maps with new, expanded borders. AKP leaders accordingly invoke themes of modernization, greatness, and pride attempting to build support for new initiatives or strategic shifts aligned with expanded power.

4. <u>Refugees</u>. Incoming migrants fleeing persecution, war, or seeking better opportunities.

5. <u>Mainstream Turks</u>. The largest political party is the right-wing Justice and Development Party, led by the current President of Turkey, Recep Tayyip Erdogan. Although the party lost some ground in the 2019 election, it still comprises a majority of Turkish representation at most levels of government.

6. <u>Working Class and Poverty Groups</u>. These groups comprise approximately 20% of the Greek population combined. The income range is between 3,000 – 6,000 Euros or less than 3,000 Euros for the impoverished group.

7. <u>Middle Class</u>. The Middle class comprises approximately 54% of the population in Greece, with a yearly income between 6,000 – 44,000 Euros.

8. <u>Upper Class</u>. Wealthy and upper-class populations are a combined 25% of the population in Greece, defined by a yearly income higher than 130,000 Euros for wealthy and with a yearly income higher than 75,000 Euros for Upper Class.

The full list of civilian groups – organized by location:
- Kurds and Social Democrats in Aegean Islands
- Moderate Opposition in Aegean Islands
- New Ottomans in Aegean Islands
- Refugees in Aegean Islands
- Mainstream Turks in Aegean Islands

- Kurds and Social Democrats in Ankara City
- Moderate Opposition in Ankara City
- New Ottomans in Ankara City
- Refugees in Ankara City
- Mainstream Turks in Ankara City

- Kurds and Social Democrats in Black Sea
- Moderate Opposition in Black Sea
- New Ottomans in Black Sea
- Refugees in Black Sea
- Mainstream Turks in Black Sea

- Kurds and Social Democrats in Eastern Anatolia
- Moderate Opposition in Eastern Anatolia
- New Ottomans in Eastern Anatolia
- Refugees in Eastern Anatolia
- Mainstream Turks in Eastern Anatolia

- Kurds and Social Democrats in Istanbul City
- Moderate Opposition in Istanbul City
- New Ottomans in Istanbul City
- Refugees in Istanbul City
- Mainstream Turks in Istanbul City

- Kurds and Social Democrats in Marmara
- Moderate Opposition in Marmara
- New Ottomans in Marmara
- Refugees in Marmara
- Mainstream Turks in Marmara

- Kurds and Social Democrats in North Cyprus
- Moderate Opposition in North Cyprus
- New Ottomans in North Cyprus
- Refugees in North Cyprus
- Mainstream Turks in North Cyprus

- Kurds and Social Democrats in Central Anatolia
- Moderate Opposition in Central Anatolia
- New Ottomans in Central Anatolia
- Refugees in Central Anatolia
- Mainstream Turks in Central Anatolia

- Kurds and Social Democrats in Southeastern Anatolia
- Moderate Opposition in Southeastern Anatolia
- New Ottomans in Southeastern Anatolia
- Refugees in Southeastern Anatolia
- Mainstream Turks in Southeastern Anatolia

- Kurds and Social Democrats in the Mediterranean
- Moderate Opposition in the Mediterranean
- New Ottomans in the Mediterranean
- Refugees in the Mediterranean
- Mainstream Turks in the Mediterranean

- Working Class and Poverty Groups in South Cyprus
- Middle Class in South Cyprus
- Upper Class in South Cyprus

- Working Class and Poverty Groups in Aegean Islands
- Middle Class in Aegean Islands
- Upper Class in Aegean Islands

- Working Class and Poverty Groups in Athens
- Middle Class in Athens
- Upper Class in Athens

- Working Class and Poverty Groups in Crete
- Middle Class in Crete
- Upper Class in Crete

- Working Class and Poverty Groups in Epirus
- Middle Class in Epirus
- Upper Class in Epirus

- Working Class and Poverty Groups in Ionian Islands
- Middle Class in Ionian Islands
- Upper Class in Ionian Islands

- Working Class and Poverty Groups in Macedonia
- Middle Class in Macedonia
- Upper Class in Macedonia

- Working Class and Poverty Groups in Central Greece
- Middle Class in Central Greece
- Upper Class in Central Greece

- Working Class and Poverty Groups in Peloponnese
- Middle Class in Peloponnese
- Upper Class in Peloponnese

- Working Class and Poverty Groups in Thessaly
- Middle Class in Thessaly
- Upper Class in Thessaly

- Working Class and Poverty Groups in Thessalonica
- Middle Class in Thessalonica
- Upper Class in Thessalonica

- Working Class and Poverty Groups in Thrace
- Middle Class in Thrace
- Upper Class in Thrace

Annex G. Key Actors

Key Actors. Actors can be individuals, organizations, political parties, or separate nations who are seeking to influence conditions within the region. Actors have resources, generally forces, economics and/or messaging that they apply leading to them gaining or losing influence and potentially shifting control in the region.

South China Sea Database. There are four Actors modeled in Athena for this portion of the study. There are two groups that influence the Philippines in general, and two international actors. Short descriptions of each actor are provided below.

Philippine Leadership
- Government of the Republic of the Philippines. Rodrigo Duterte, the mayor of Davao, Mindanao, for twenty years, was elected president of the Republic of the Philippines in May 2016, for a six-year term. A populist, Duterte has been extremely popular for his brutal war on crime, but has distanced himself from the Philippines' treaty ally, the U.S., and has alternately courted China's favor and declared he would defend the Philippines against Chinese encroachment. His international policies are sometimes at odds with those of other parts of the GRP, who, on the whole, are more consistently pro-American alliance and wary of China's intentions. Corruption and patronage plague the GRP at all levels.

- Armed Forces of the Philippines (AFP). With a defense budget of around $3.9 billion, and accounting for around 1.2% of the Philippines' total GDP, the AFP has around 125,700 active and 130,000 reserve personnel in three armed services: Army, Navy, and Air Force. The Philippine Army is the largest branch of the AFP with some 80,000 professional personnel. The AFP is supportive of the U.S. alliance and does not trust China's intentions.

International Actors
- Chinese Communist Party. The People's Republic of China is a party-state, under the CCP. The primacy of the party is enshrined in the constitution, which, more recently, further centralized the leadership of China around President Xi, whose "Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era," was adopted into the document in 2017. Especially since 2010, China has become more active throughout the region, including the South China Sea, seeking to establish regional hegemony.

- United States Government. The U.S. has grown increasingly wary of China's intentions. The previous U.S. administration broke with precedent and declared

that China has no legal authority to its claimed territories in the South China Sea. The current administration has reiterated that position.

Eastern Mediterranean Database. This database includes 20 actors of whom ten are centered in Greece while two are in Turkey and two are in Cyprus. In addition, there are four international actors represented in the database.

In Greece
- Greek President. Katerina Sakellaropoulou, the president, is the Head of State and is elected by parliament every five years. New Democracy Party.

- Prime Minister of the Hellenic Republic. Kyriakos Mitsotakis, the prime minister, is the Head of Government. The Ministerial Council is the collective decision-making body that constitutes the Government of Greece. It is composed of the prime minister, ministers, deputy ministers, and ministers without portfolio.

- Greek Orthodox Church. The Greek Orthodox Church refers to the body of several churches within the larger communion of Eastern Orthodox Christianity. Approximately 10 million members within Greece and 13-15 million members elsewhere. The church is under protection of the state.

- Greek Military. The Greek military is a conscripted force. The reduction of military spending has long been an issue in Greek politics. Some of the parties on the left, such as the Communist Party of Greece and Synaspismos, have been vocal in condemning military spending.

- Lambrakis Press Group/Greek Media. The Lambrakis Press Group is a Greek media company controlled by Christos Lambrakis. It has played a dominant role in Greek publishing and Greek politics, especially through its flagship newspapers, To Vima and Ta Nea (center-left). It strongly supported the Greek Socialist Party (PASOK) in the 1980s and 1990s. The media is considered to have a high degree of partisan bias, particularly pro-governmental stances.

- Greek Mafia. A substantial number of Greek organized crime groups are centered in Athens. However, many other (semi) organized groups operate throughout other cities and even in smaller villages. Criminal clans can have their origins from all over Greece: Mafia groups in the bigger cities are especially involved in racketeering, the illegal smuggling of oil, money laundering, weapon and drug trafficking as well as murder.

- <u>Romani People of Greece</u>. The Roma in Greece live in scattered communities throughout the whole country. Notable centers of Romani life in Greece are Agia Varvara which has a very successful Romani community and Ano Liosia where conditions are poorer. Roma largely maintain their own customs and traditions. Official government estimates place their numbers around 110,000 but other estimates run as high as 350,000.

- <u>Muslim Minority</u>. The Muslim minority in Greece is concentrated primarily in Thrace. It was given legal status by provisions of the Treaty of Lausanne (1923) and is Greece's only officially recognized religious minority.

- <u>Golden Dawn</u>. A popular far-right political party in Greece whose general secretary and several members of parliament have been found guilty of leading a criminal organization.

- <u>SYRIZA Party</u>. The Progressive Alliance, known best by the abbreviation SYRIZA, is a political party in Greece originally founded in 2004 as a coalition of left-wing and radical left parties.

- <u>North Macedonia Leader</u>. An unnamed actor included in the Athena database to represent an influential leader in North Macedonia.

In Turkey
- <u>Nation Alliance Party (Turkey) Opposition</u>. Center-left to center-right. This party was formed to contest the country's 2018 general election and has aligned itself against President Erdogan. It was formed on the basis of protesting the transition from a parliamentary to a presidential system. It consists of four opposition parties, namely the Republican People's Party (CHP), the Good Party (İYİ), the Felicity Party (SP), and the Democratic Party (DP).

- <u>Peoples' Democratic Party (Turkey)</u>. Left-wing activism. Also known as the Democratic Party of the Peoples. This party is pro-minorities and focused on left-wing issues such as feminism, minority and youth rights, and egalitarianism. It is aligned with socialism and socialist parties.

- <u>Justice and Development Party (Turkey)</u>. Right-wing populism. The Justice and Development Party is led by the President of Turkey, Recep Tayyip Erdoğan. Its ideology is conservative democracy. This party holds the majority of positions in all levels of government, from the Grand National Assembly to the municipal assemblies.

In Cyprus

- Turkish Cypriot Leader. An unnamed actor included in the Athena database to represent an influential Cypriot leader with affiliations to Turkey.

- Greek Cypriot Leader. An unnamed actor included in the Athena database to represent an influential Cypriot leader with affiliations to Greece.

International Actors

- North Atlantic Treaty Organization. Both Greece and Turkey are members of NATO. As a result, NATO leadership has an influence over both countries. NATO has previously used its influence to help Greece and Turkey avoid conflict with one another and is generally interested in keeping the peace between the two nations.

- People's Republic of China. The Government of China. China remains active throughout the region and primarily involves the economic sphere through its "Belt and Road" investments in the transportation and energy sectors. China seeks to employ soft power measures to gain influence. As in other geographical areas, Chinese companies are also making commercial and real estate investments to increase their national influence.

- Russia. The Government of Russia. Russia primarily attempts to influence regional stability through the use of soft power measures. The approach is multifaceted, covering factors such as political ties, military presence, trade indicators, diplomatic ties, and cultural and religious ties (e.g., Orthodox minority). Russia is more active in efforts to manipulate conditions particularly with regard to energy.

- United States. The United States Government. The U.S. generally endeavors to hold a neutral position in the affairs of other sovereign nations but in this geographical area, the U.S. is more actively engaged in a containment strategy against Russia's interference and influence in the Republic of Cyprus since Cyprus is a member of the European Union and a potential candidate for NATO.

Annex H. Acronyms and Abbreviations

AFP - Armed Forces of the Philippines

ASEAN - Association of Southeast Asian Nations

CCP - Chinese Communist Party

CoA - Course of Action

DIME-FIL - Diplomatic, Information, Military, Economic, Financial, Intelligence and Law Enforcement

ENI - Essential Non-infrastructure Investment

EU - European Union

EEZ - Exclusive Economic Zone

GDP - Gross Domestic Product

GRP - Government of the Republic of the Philippines

IIJO - Integration of Information in Joint Operations

M&SO - Modeling and Simulations Office

OIE - Operations in the Information Environment

PMESII-PT - Political, Military, Economic, Social, Infrastructure, Information, Physical Environment, and Time

SMA - Strategic Multilayer Assessment

SME - Subject Matter Expert

TRADOC - Training and Doctrine Command

UN - United Nations

UNCLOS - UN Convention on the Law of the Sea

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