HEDGEMONY

A GAME of STRATEGIC CHOICES



RULEBOOK



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Preface

This rulebook and the accompanying player guide, *Hedgemony: A Game of Strategic Choices—Player Guide*, describe Hedgemony, a pedagogical wargame designed for U.S. defense strategy and policy professionals, as well as graduate school faculty and students in related fields of study. This rulebook provides detailed, technical descriptions of the game, including the rules of play, how to plan and set up a game session, and how to design, modify, and produce a game session scenario. The primary audience of this rulebook is game facilitators—people who will plan and execute a game session for the players. Hedgemony is designed to be expertly facilitated by people who have significant topical expertise and who have read and understand the contents of this rulebook.

If this is the reader's first exposure to Hedgemony, it is strongly recommended to read the player guide before reading this rulebook. The player guide provides a more thorough introduction to the game and is written for people who may have to play Hedgemony but who do not want to be bothered with a lot of game-specific details. The player guide is also intended for decisionmakers who may be considering using Hedgemony in a professional or academic environment. Therefore, the player guide provides a top-level overview of what it takes to plan, prepare, and execute a game session, guidance for players, and notes on how the game was designed, including notable feature and trade-off choices that were made by the design team and that should be considered by anyone who is thinking about using Hedgemony.

In keeping with the pedagogical purpose of the game, an extensive glossary of terms (*Hedgemony: A Game of Strategic Choices—Glossary and Abbreviations*) is included in its own separate booklet. Because it is routine

for the defense community to commandeer commonly used words and overload them with defense-specific meanings (often, with multiple conflicting meanings), we have tried to differentiate between common and **domain**-specific usage by indicating all formal terms in bold type when first used in each book and by providing definitions for those terms in the glossary. The booklet also includes an extensive list of abbreviations used throughout the books and the game pieces.

The initial research and development of Hedgemony was sponsored by the Office of the Under Secretary of Defense for Policy and conducted within the International Security and Defense Policy Center of the RAND National Security Research Division (NSRD), which operates the National Defense Research Institute (NDRI), a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense intelligence enterprise. For more information on the RAND International Security and Defense Policy Center, see www.rand.org/nsrd/isdp or contact the director (contact information is provided on the webpage).

Funding to produce the game in a format useful for a broader policy-making audience was provided by gifts from RAND supporters and income from operations.

¹ The name **Hedgemony** arose from the nature of a common challenge facing those who craft U.S. defense strategy. For the past 30 years, U.S. defense policymakers have been focused on an environment that has presented the United States with options for employment of defense forces in many different roles (such as humanitarian assistance, counterinsurgency, and major power conflict) and in many different locations (such as Afghanistan, Estonia, Haiti, Iraq, Korea, and Somalia). U.S. defense policymakers must prepare for a variety of near-term contingencies while also building U.S. armed forces for the future. The tension inherent in this set of challenges led us to think in terms of "hedging strategies"—the kinds of strategies investment professionals use to deal with uncertainty in the investment markets. This challenge also typically entails efforts to either maintain parity or achieve overmatch with one's adversaries. Hence, we have the term **Hedgemony**.

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Abbreviations

Al	artificial intelligence	LRA	Lord's Resistance Army
AOI	area of interest	LRF	long-range fires
AOR	area of responsibility	mod	modernization
BH	Boko Haram	MRBM	medium-range ballistic missile
BMD	Ballistic Missile Defense	NATO	North Atlantic Treaty Organization
C4ISR	command, control, communications,	OCONUS	outside contiguous United States
	computers, intelligence, surveillance, and	PRC	People's Republic of China
	reconnaissance	R&D	research and development
CAR	Central African Republic	RP	Resource Point
CF	Combat Factor	RT B	Resolution Table B
CONUS	contiguous United States	RU	Russia
CRT A	Combat Resolution Table A	SCS	South China Sea
CT	counter-terrorism	SOF	special operations forces
D10	ten-sided die	SREB	Silk Road Economic Belt
DoD	U.S. Department of Defense	UN	United Nations
DPRK	Democratic People's Republic of Korea	USAFRICOM (or	U.S. African Command
EU	European Union	AFRICOM)	II O O o la la la comuna d
FARC	Revolutionary Armed Forces of Columbia	USCENTCOM (or CENTCOM)	U.S. Central Command
FF	Force Factor	USEUCOM (or	U.S. European Command
GCC	Gulf Cooperation Council	EUCOM)	
IAMD	Integrated Air and Missile Defense	USINDOPACOM (or	U.S. Indo-Pacific Command
IDF	Israeli Defense Force	INDOPACOM)	
IP	Influence Point	USNORTHCOM (or	U.S. Northern Command
IR	Iran	NORTHCOM)	
ISI	Inter-Services Intelligence	USSOUTHCOM (or SOUTHCOM)	U.S. Southern Command
ISIS	Islamic State of Iraq and Syria	300THOOM)	

Introduction

Hedgemony is a global, multi-sided, turn-based, facilitated, adjudicated wargame designed to teach U.S. defense professionals how different strategy and policy priorities could affect key planning factors in the trade space at the intersection of force development, force management, force posture, and force employment. Players, representing Blue (the United States, the North Atlantic Treaty Organization [NATO], and the European Union [EU]1) or Red (Russia [RU], the People's Republic of China [PRC], the Democratic People's Republic of Korea [DPRK], and Iran [IR]), are presented with a global situation, competing national incentives, constraints and objectives, a set of military forces with defined capacities and capabilities, and a pool of periodically renewable resources. Players are also asked to summarize their strategies and objectives in writing before play starts. The game is about players making difficult choices by managing the allocation of resources and forces in alignment with their strategies to accomplish their objectives within resource and time constraints.

Hedgemony is designed to be expertly staffed and facilitated. Facilitation is provided by a White Cell, a team composed of two or more experts who act as game masters and referees. Facilitators are responsible for

- Advising players on game rules and play strategies to accomplish learning objectives
- Keeping play on pace and on track through the various **phases** of each game turn
- Advising and walking players through the adjudication procedures for each action and event
- Maintaining and summarizing the overarching "story" of what player actions or interactions, game events, and their **outcomes** would likely represent in the real world
- Resolving disagreements over interpretation of game situations and rules
- Overseeing notetaking and data collection.

Although players are expected to try to "win" by achieving a certain amount of Influence—either in absolute terms or relative to one or more other players—within a certain number of game turns, the game is primarily focused on the learning objectives of the U.S. player,² with the NATO/EU player, the Red players, and the facilitators all serving, essentially, as "training aids." Thus, play balance,3 particular strategies and

priorities of specific non-U.S. players, and the specific sequence and frequency of events played by the White Cell may all be shaped by session learning objectives as part of a given session scenario.⁴

In Hedgemony, a session scenario is embodied in a collection of **Action** and Investment Card decks and Event Card decks assigned to players and the White Cell, respectively, and a set of placemats and screens that provide status "dashboards" that include the scenario's Starting Conditions and Victory Conditions for each player's forces, resources, and capabilities. The player decks for Red players are more comprehensive than those for Blue because the default scenario was intended to provide a wide variety of preconsidered actions that Red could take to "test" Blue's strategy priorities, and because the scenario is intended to allow for Blue free-play, constrained only by the forces and resources available and the typical limits of the U.S. Defense Secretary's authorities.

The card decks represent scenario-specific "catalogs" of ready-toadjudicate actions and events that may be invoked by either players or the White Cell or that may occur at random. The cards are intended to suggest, define, shape, and constrain the variety of actions that players may take or to which they may need to respond during each turn; how often (and, sometimes, in what sequence) those actions may occur; the costs, in resources or forces, of actions or events; the range and probabilities of outcomes that could occur as a result of player responses, and the ways in which the relative capacities and capabilities of forces involved could affect those probabilities. The cards also specify the conditions and procedures by which the outcomes of those actions, interactions, and events should be resolved in accordance with the game rules and the scenario in play.

This rulebook details the game rules, procedures, and tables necessary for players to develop, manage, deploy, and employ their forces, manage their resources, and adjudicate player actions and game events, assisted by the White Cell. The most-frequently used tables and procedures in this rulebook are also provided on convenient placemats to facilitate easy reference during play. Text in bold type denotes terms we have formally defined in the glossary (Hedgemony: A Game of Strategic Choices—Glossary and Abbreviations). The glossary booklet also includes an extensive list of abbreviations used throughout the books and the game pieces.

¹ At the time this game was designed, the United Kingdom was still a member of the EU. As we were going to press, the details of how the United Kingdom's departure would manifest itself in our game's abstraction of Europe were still uncertain. Therefore, we chose not to try to independently represent the United Kingdom in the default scenario built into the game.

² In the context of the game, the term "player" does not necessarily refer to an individual person. Instead, each "player" might be multiple students or defense professionals working together, as a team.

³ Game balance, or play balance, is a measure of perceived fairness among the players—the perception that each player's freedom of action and chances for success relative to those of other players are reasonable or can be justified by the scenario context.

A game session is one instance of the game, played from start to finish. A session scenario is the situational, "state-of-the-world" context in which a particular game session is played. A given session scenario may be repeated over multiple sessions or may be adjusted from session to session, depending on the learning objectives.

1. Game Components, Prerequisites, and Setup

The game components, prerequisites, and setup procedures that are necessary for a successful session of Hedgemony are outlined in this chapter.

Game Components

The game components needed to play a Hedgemony game session include the following, which come packaged in the game box:

- A game board representing an abstraction of the world
- A set of **forces counters** (or **chits**) representing the military forces of each player and of other nations and actors that may be part of a session scenario (e.g., **proxies**, allies)
- A deck of **Action and Investment Cards** for each player
- A deck of player-specific **Domestic Event Cards** for the White Cell
- A deck of **International Event Cards** for the White Cell
- A set of red, blue, and white ten-sided dice (D10s)
- A cardboard placemat that sits on the table in front of each player to help them
 - Track the status of their National Technology (Tech) Level and Critical Capability Modernization (Mod) Levels
 - ➤ Track the status of their force **Readiness Level** (U.S. player only)
 - > Organize their Action and Investment Cards
- A freestanding cardboard screen that stands in front of each player's placemat and displays the player's **Starting Conditions** and **Victory Conditions** and the Victory Conditions of the other players
- Various other chits and cards used to track the status of player resources, Victory Conditions, forces in play, and player decisions
- > Resources tracker placemats
- ➤ Various procedural, calculation, and adjudication placemats
- ➤ Player calculation worksheets

Provided in separate packaging are

- ➤ This rulebook
- A player guide and set of designer notes
- A glossary of terms and a list of abbreviations.

Figure 1.1 shows a selection of the game components.

Prerequisites

Executing a successful Hedgemony game session requires more than just game components, user-supplied facilities, and a group of players. The game is designed to be expertly facilitated, and a certain amount of domain expertise is expected from the participants. Specific requirements and recommendations for expertise will vary by learning objectives and scenario, but we provide some baseline recommendations in later sections. Key prerequisites that a game sponsor and facilitators must consider during the planning of a game session are outlined in the following subsections.

Learning Objectives and Data Collection

To get the most out of the considerable investment in time and human resources that it takes to run a game or series of games, the sponsor and facilitators should have a clear idea of what they hope to learn (or teach). Therefore, it is important to develop a set of learning objectives that will influence

- ➤ What guidance is given to the Blue and Red players
- The pace and balance of play and how (and how often) to inject events into the game
- > How many iterations (sessions) of the game are run and how many turns to play before each session is ended
- ➤ How the default scenario is to be modified to suit the session objectives.

The most important aspect of the game is not a game's outcome (measured in terms of winning or losing). It is, instead, the game's ability to help players understand what trades they had to make and how they made them, as well as how those trades may have caused the players to adhere to or diverge from their initial strategic goals.

Therefore, capturing dialogue and identifying key decision points, decision criteria, and the factors that influenced those decisions are where the opportunities to expand on the learning value of the game take place. The White Cell needs to focus as much on helping capture and share these observations as it does on ensuring efficient and effective game play. Key planning factors for a game session include the means to collect desired data, as well as guidance to notetakers on what to collect and how to capture it from turn to turn.

User-Provided Facilities and Materials

The user-provided facilities and materials that are needed to play a game session, as designed, are

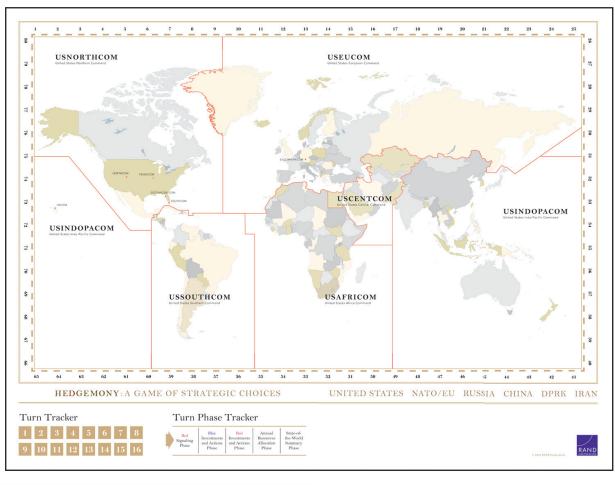
- ➤ A room with a rectangular table large enough for the game board and seats for approximately ten to 12 people (i.e., a small conference room)
 - ➤ The game board is 27 in. high by 36 in. wide and comes mounted on folding chipboard backing. When unfolded, the two map sections are normally placed side by side on the table with the long side of the map aligned with the table's long side (see the "Setup" section).
 - ➤ To allow space for the game board, player placemats, screens, and one or more facilitator laptop computers, the minimum recommended table size is 5 ft by 10 ft.
- A projection screen for the facilitator laptop
- ➤ Two laptop computers for the White Cell (one for the adjudicator that is connected to the projection system, and one for the notetaker)
- > Notepads and writing materials.

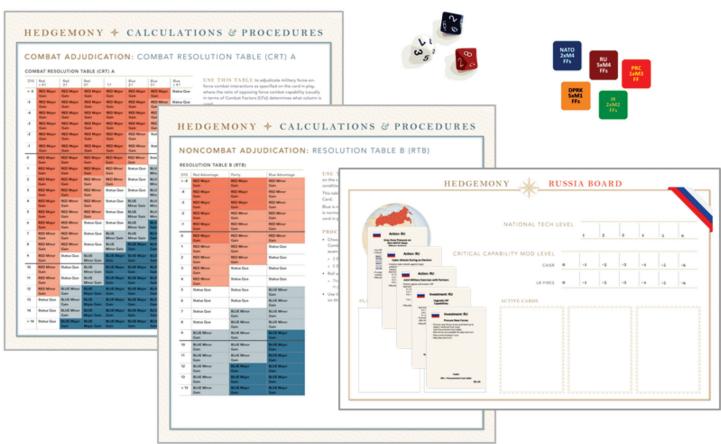
The Scenario

A session scenario in Hedgemony is embodied in a collection of card decks that represent scenario-specific "catalogs" of ready-to-adjudicate

¹ **Domain expertise** in this rulebook refers to any narrowly or broadly defined field, area, arena, sphere, discipline, or sector of expertise defined by the professional categories and/or specialties that are typical of defense, intelligence, or government strategy, policy, planning, or operations.

Figure 1.1. A Selection of Game Components





actions and events that may be invoked by either the players or the White Cell or that may occur at random. The cards are intended to suggest, define, shape, and constrain the variety of actions players may take or to which they may need to respond during each turn; how often (and, sometimes, in what sequence) those actions may occur; the costs, in resources or forces, of actions or events; the range and probabilities of outcomes that could occur as a result of player responses; and how the relative capabilities and capacities of forces involved could affect those probabilities. The cards also specify the conditions and procedures by which the outcomes of those actions, interactions, and events should be resolved in accordance with the game rules and the scenario in play.

Once the intended learning objectives are settled, game planners should sketch out a scenario that includes an outline of the **security environment** and the "actors" needed for the game, which could include allies, proxy forces, and third-party entities that may need some representation. Then, the card decks should be reviewed to ensure that they provide the variety and types of actions and events that could lead to or compel the types of interactions and decisions players should encounter during play to accomplish the session's learning objectives.

Note that the default scenario does not necessarily represent or reflect U.S. defense policy. The choice of NATO/EU,² Russia, China, Iran, and the DPRK as principal players along with the United States was consistent with contemporary published research,3 and was not meant to represent, imply, or predict any specific threat or allied intentions, interactions, or conflicts. Likewise, the selection of cards in the default scenario was not intended to suggest or predict the ranges or types of actions, interactions, or events that might occur or to be reflective of any particular strategy or posture. The card decks provided with the game represent a "due diligence" assessment of the ranges and types of actions, interactions, and events that players should consider, given the game's teaching objectives, including some that may be highly unlikely or risky. It is up to session planners to determine whether the actions, investments and events in the default scenario meet their needs or must be tailored to meet specific game session objectives. Specific details on how to develop a scenario are included in the appendix of this rulebook.

U.S. Player

The U.S. player is the reason the game exists—accomplishing the learning objectives of the people who represent the U.S. player is the purpose for which Hedgemony was designed.⁴ In general, the U.S. player should constitute graduate students or professionals who are at least familiar with military strategy and the role strategy plays in shaping military **force structure**. Some **operational** experience is useful but not required. If the U.S. player does not have at least one individual with some background in force development or force management, then a facilitator with such experience should be assigned to assist the U.S. player.

Non-U.S. Players

Non-U.S. players should be graduate students or professionals with at least some expertise in the country or region they will represent. If such expertise is thin, players can compensate somewhat through pre-game research into recent news and foreign affairs articles on appropriate countries and regions.

Specific expertise that will significantly enhance the value of NATO/EU and Red play to the U.S. player's learning objectives includes some intelligence and/or foreign affairs experience, including executive briefing experience. The main reason this is desired is that non-U.S. players are "double-hatted" in Hedgemony. On the one hand, they play the roles of allies and adversaries of the U.S. player. On the other hand, however, non-U.S. players are expected to play the role of advisers to the U.S. player and to answer U.S. players' questions concerning their country's or region's game-relevant policies and interests. During the **Red Signaling Phase** of each game turn (described in Chapter Three), Red players perform the role of intelligence briefing officers for Blue, presenting a summary of what Blue is likely to know about their nation's or region's intentions and of other salient intelligence relevant to Blue planning.

Facilitators

Facilitators constitute the White Cell, serving as both game masters and advisers. A minimum of two facilitators is needed, although three are preferable. Four facilitators are desirable if the U.S. player needs force development and force management subject-matter expertise. Facilitators must understand both how to run a wargame generally and how to run Hedgemony, including having a thorough understanding of the rules and procedures described in this rulebook.

It is highly desirable for at least one facilitator to have both operational experience and a solid grounding in force development and force management (i.e., an appropriate staff assignment in the Pentagon on a Service headquarters staff or the Joint Staff, or on the staff of the Office of the Secretary of Defense [OSD]), because the most-complex aspects of Hedgemony's game rules and adjudication procedures revolve around these factors. It is also desirable for at least one facilitator to have some defense strategy background (again, a previous staff assignment with OSD or the Joint Staff or in a defense think tank would be very useful).

The reason for these prerequisites is the need for facilitators to quickly and seamlessly translate player intentions into the appropriate game abstraction during play, and, conversely, translate what happens in the game into players' frames of reference. The facilitators' main job in Hedgemony is to help players (both Blue and Red) execute their strategies and carry out their intentions—without them getting bogged down in unfamiliar game mechanics or irrelevant detail. It is also the facilitators' job (as the White Cell) to provide guidance to Red players to shape their play (e.g., how aggressive to play; the turn-by-turn pace, scope, and focus of actions; the trade space between planning factors) in alignment with Blue learning objectives.

Participant Training

Accomplishing a typical game session's learning objectives requires completion of a useful number of turns so that players can see meaningful changes in the force development, force management, force posture, and force employment trade space that resulted from their attempts to execute their strategies. In our experience, between five and ten turns may be needed, depending on the scenario. To achieve the pace of play needed to get through this number of turns in a half-day or full-day session, both players and facilitators will need to be trained (unless all but one

² At the time Hedgemony was designed, the United Kingdom was still a member of the EU. As we were going to press, the details of how the United Kingdom's departure would manifest itself in our game's abstraction of Europe were still uncertain. Therefore, we chose not to try to independently represent the United Kingdom in the default scenario we built into the game. As of this writing, the United Kingdom was still a member of NATO.

³ David Ochmanek, Peter A. Wilson, Brenna Allen, John Speed Meyers, and Carter C. Price, U.S. Military Capabilities and Forces for a Dangerous World: Rethinking the U.S. Approach to Force Planning, Santa Monica, Calif: RAND Corporation, RR-1782-RC, 2017.

⁴ As noted in the introduction, in the context of the game, the term "player" does not necessarily refer to an individual person. Instead, each "player" might be multiple students or defense professionals working together, as a team.

or two participants and facilitators have played a full Hedgemony game session before).

Training involves a dry run through several game turns with all participants to familiarize everyone with the sequence of play, the rules of play, a representative set of actions and events, and how adjudication works. Three to four hours should be allocated for this, because the first few turns will, obviously, be unfamiliar to everyone and involve "churn" as players try to find their frames of reference, figure out how to translate their strategic and operational intentions into the game abstraction, and learn enough of the rules to feel comfortable. Facilitators will also need some time to get comfortable with their roles in the sequence of play if they have not facilitated a Hedgemony game session before. Because of the time and level of effort needed for training, as well as the confusion that can sometimes arise as players and facilitators learn their roles and the rules, it is advisable to schedule the training on a day prior to the actual game session(s) so that lessons learned during training can be incorporated into the game session, and everyone can start the game fresh.

Game Setup

Figure 1.2 shows a typical game setup. The game board and other materials should be laid out on the table as shown in the figure.

- The Blue player and Blue resources tracker placemats should be on the end of the table opposite the projection screen.
- The game board should be placed as near to the Blue side as feasible, with the long side of the map aligned with the long side of the table, as shown; the main reason for this alignment is to permit easy access to the map by both players and facilitators, who will be moving forces and markers around throughout the game turns.
- The Red player and Red resources tracker placemats should be on the side of the game board opposite the Blue players, nearest the projection screen, although they need not be specifically arranged as

- shown in Figure 1.2 (i.e., who sits next to whom could be scenariodependent or determined by the White Cell).
- The facilitator laptop(s) should be on the end of the table nearest the projection screen (one is necessary for the adjudication controller, and another is desirable for in-stride note-taking).
- The freestanding screens should be placed at the head of each player's placemat, with the country name facing outward (each player should be able to read their own Starting Conditions, resource allocation, and Victory Conditions).
- Player Action and Investment Card decks should be distributed to the appropriate player placemats.
- > The International Event Card and player Domestic Event Card decks should be placed on the table for use by the appropriate facilitator.
- The Starting Conditions for the desired scenario should be consulted (the scenario packaged with the game is the default), and player forces counters (chits) and tracking counters (chits) should be laid out on the game board and placemats as follows, in accordance with the scenario Starting Conditions:
 - Circular U.S. and NATO/EU tracking chits on the Blue resources tracker placemat, corresponding to each player's starting resources
 - Circular China, Russia, Iran, and DPRK tracking chits on the Red resources tracker placemat, corresponding to each player's starting resources
 - Circular tracking chits (two for each player) on the appropriate National Tech Level and Critical Capability Mod Level trackers on player placemats, corresponding to each player's Starting Conditions
 - A U.S. circular tracking chit on the U.S. player placemat Readiness tracker (see Chapter Fourteen for more on the U.S. Readiness level)

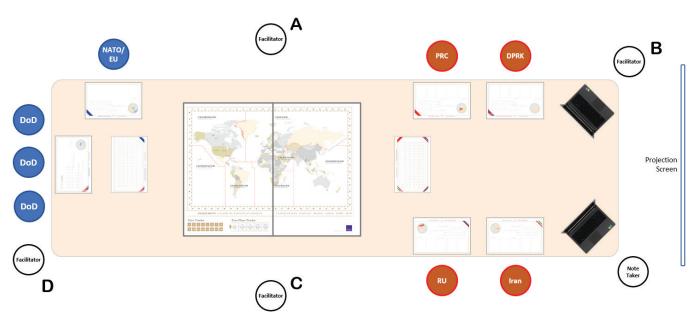


Figure 1.2. A Typical Game Setup Configuration

- ➤ Player-labeled circular tracking chits on the game board Influence tracker (around the periphery of the map), corresponding to each player's starting Influence
- ➤ Player forces counters (some number for **Force Factors [FFs]** at various Mod Levels) on the game board as specified in the initial conditions (see Chapter Four for more detail).
- Two response cards (one "Yes" and one "No") should be placed on each player placemat.
- ➤ The dice should be placed on the table in locations reachable by the appropriate players.

Facilitator Roles

The suggested roles for the facilitators are as follows:

- a. *Scenario/Event Controller (game master)*. This person runs the game, keeps the game on track with time and learning objectives, and manages all of the Event Cards.
- b. *Adjudication Controller*. This person ensures that, based on the flow of play, the appropriate card, rule section, or table is displayed on

- the screen for everyone to read and reference; talks players through all of the action- and event-specific adjudication procedures and probabilities; and resolves adjudication disputes.
- c. Moves/Status Controller ("croupier"). This person manages all the counters (playing pieces) on the game board and tracking mats and compiles and presents the summary of highlights during the Stateof-the-World Summary Phase of the game turn.
- d. *Blue Talker (rules/procedures adviser)*. This person assists the Blue players with the rules and procedures associated with developing and managing their forces.

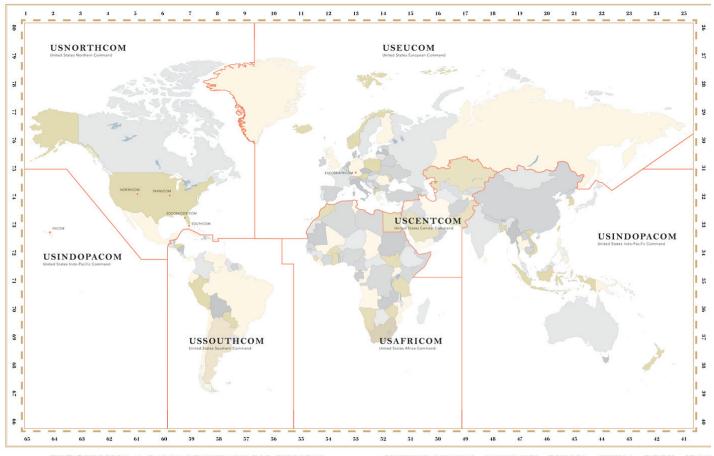
We consider the Scenario/Event Controller (game master) and Adjudication Controller to be the minimum necessary facilitators to run a Hedgemony game session, and we consider the Moves/Status Controller (croupier) to be highly desirable. The Blue Talker (rules/procedures adviser) is optional but highly desirable if the U.S. player does not have suitable levels of operational or force development experience, as described in the Prerequisites section.

2. The Game Board

The Hedgemony game board, shown in Figure 2.1, is essentially a stylized version of the Unified Command Plan map.1

The boundaries shown on the game board include both national boundaries and the boundaries of U.S. combatant command areas of responsibility (AORs). Although these AORs are a U.S. military command and control construct in the real world, we use them in Hedgemony mainly to regulate the movement of forces (both Blue and Red). This is for convenience only, to simplify the game rules. When players take actions with their forces, either proactively during their Investments and Actions Phase or reactively in response to other player actions or events, they may move or place one or more forces counters representing the forces they want to employ on the board at or near the location of the action or event (i.e., within the area of interest [AOI]). AOR boundaries regulate movement by imposing costs (in Resource Points [RPs]) when moving from one AOR to another. These costs and associated procedures are detailed in Chapter Nine.

Figure 2.1. Hedgemony Game Board



HEDGEMONY: A GAME OF STRATEGIC CHOICES

UNITED STATES NATO/EU RUSSIA CHINA DPRK IRAN

Turn Tracker

Turn Phase Tracker



¹ The Unified Command Plan map was found at U.S. Department of Defense (DoD), Combatant Commands, homepage, undated.

3. Play Sequence

This chapter outlines the phases of a typical Hedgemony game turn, including how the passage of time is represented in the game.

Time in Hedgemony

The sequence of play in Hedgemony involves multi-phase turns that represent, very roughly, a year in time, corresponding to a typical DoD planning, programming, and budgeting cycle. Force development timelines, including how long it takes to mature an advanced technology and to transition that technology through **acquisition** or **modernization**, have been artificially compressed in the game. The reason is simple: To accurately represent how long it would take for new capabilities to be fielded would take too many turns. A key objective of the game design was to provide an abstraction of the world that permitted a useful number of turns to be played in a single half-day or full-day game session. Thus, technology and capability development timelines have been artificially compressed to permit players to see the effects of their investments manifested as force capability and/or capacity changes in a few turns of play.

How a Game Session Begins

Play begins with facilitators summarizing the state of the world (i.e., the **global security environment**, trends and uncertainties, what forces are where, who is doing what in the world) at the start of the game. Next, both Blue and Red players outline the main themes of their strategies, their intentions, and their objectives *in writing* (i.e., what they are trying to accomplish in the game in the context of their strategies). Depending on learning objectives, there may be further discussion on what may be known between players about their respective strategies, even to include having each player summarize some or all of their intentions to the other players.

How Action and Investment Cards Affect the Scope and Pace of Play

All players receive a deck of Action and Investment Cards during game setup that represents a catalog of potential actions and investments that they may consider during their turns. Blue's player decks are much smaller than Red's because under typical Blue strategies, the Blue players will be posturing their forces to deter Red and responding to Red actions, but also because Blue is given much more freedom to imagine how they could employ their forces. It is up to the White Cell to determine how to translate Blue's intentions into the game abstraction. Red player actions and investments, on the other hand, are constrained to the cards in their decks at the start of the game, and the rules for how they may play their cards are used to control the pace of play.

Under the default scenario, the rules for playing Action and Investment Cards differ between Blue and Red players:

- ➤ In general, the costs (in RPs) and conditions associated with playing a card are specified on the card.
- ➤ During the appropriate phase of their turn, Blue players may choose to play as many Action and Investment Cards as they can afford to play during their turn.
- ➤ Red players are more constrained—they may choose to display (and later play) up to three cards from their Action and Investment Card deck each turn. (More details are provided in the "Phases of a Game Turn" section.)
- For Red players, if more than one card is played, at least one *must* be an **Action Card**, and one *must* be an **Investment Card**. Cards are

- played and resolved (adjudicated) in sequence (the specific rules for this are covered below, in "Phases of a Game Turn").
- ➤ Also for Red players, each additional card played during a turn, after the first card, costs one additional RP per card.

For all players, the costs (in RPs) and conditions for playing each card (e.g., how often) are shown on the card.

Optional Pace of Play Rule

A way to control the pace of play for Red players is to adjust the "additional card" cost. To allow more freedom of action (and actions per turn), simply reduce the subsequent action costs (e.g., impose one additional RP cost after the *second* action instead of the first, or impose no additional costs at all).

Phases of a Game Turn

A typical game turn in Hedgemony involves the following phases, played in sequence:

- ➤ Red Signaling Phase
- ➤ Blue Investments and Actions Phase
- > Red Investments and Actions Phase
- ➤ Annual Resources Allocation Phase
- > State-of-the-World Summary Phase.

At any point during the first three phases, the White Cell may also inject (or may roll a die to determine whether to inject) **International Events** and/or player-specific **Domestic Events**. These phases and events are detailed in the following subsections.

Red Signaling Phase

Think of the Red Signaling Phase as Blue's daily intelligence briefing. The main purpose of this phase is for each Red player to summarize what Blue players would likely know about their intentions, consistent with the state of the world at that time in the game. During this phase, Red players "work for" Blue. In the course of their summaries, Red players are expected to respond to U.S. and NATO/EU player questions about context and details. What they reveal about their intentions should reflect an honest assessment of what Blue *would or could likely know* based on Blue intelligence capabilities or on specific pre-game guidance as part of the session scenario.

To prepare for signaling, the Red players should put some thought into figuring out what they plan to do over the next few turns, in alignment with their strategy. Specifically, the players should review the variety of Action and Investment Cards in their deck and select the cards that best align with their strategy and intentions. Each Red player then selects three cards that they will display (i.e., signal) to the other players. These can be a mix of cards that they actually intend to play, cards that represent a false signal to Blue, and cards that they have not yet decided to play. At least one of the cards *must* be an Action Card and at least one *must* be an Investment Card.

An important consideration under the default scenario is that Red players have the option of choosing *not to play any card at all* (when the time comes to do so). They only have to pay for those cards they actually choose to play. In other words, Red players may decide, based on events or actions that precede their own, against playing the cards they intended and displayed during signaling. This allows greater, more-informed

freedom of action for Red. It also allows Red to force Blue to consider hedging actions against events that Red has signaled but may have no intention to play. Or, Red can signal an event and wait to see if Blue hedges before Red decides whether or not to act. These rules provide a much more challenging scenario for Blue players, who must weigh hedge costs against their preferred priorities that align with their strategic objectives.

Once they have picked their three cards, Red players lay the cards face up in the spaces provided in the lower right of their placemats. When all four Red players have laid their cards down, the signaling briefs begin.

The briefing sequence is determined by the White Cell. The sequence could be random or directed. The directed sequence is used in the default scenario and provides the greatest flexibility to the White Cell for keeping the game on track. The rationale for selecting the briefing order includes the context of actions, events, and outcomes that might have emerged in previous turns, as well as how the White Cell may want to control or shape what Blue and Red already know and are made aware of during the briefing (i.e., the briefing order can be important to how the game proceeds and what decisions players may face).

When directed, each Red player presents their intelligence assessment to Blue. The order in which Red players choose to cover their topics, the amount of detail they provide, and how close (in terms of accuracy and completeness) the assessment is to their actual intentions as the Red player are a judgment call, but Red players should be influenced by the scenario guidance they have been given by the White Cell, as well as by what they have been instructed about the session learning objectives. In particular, Red should not deliberately misinform Blue without specific guidance from the White Cell to do so. In general, the challenge for Blue is not a lack of information or misleading information; it is a surplus of information. It is extremely helpful if Red players are "in character" (as intelligence briefing officers) during their signaling brief.

During or after the conclusion of Red signaling, the White Cell may inject one or more International or Domestic Events, and these are resolved in sequence.

Except for any events the White Cell may choose to inject, the Red Signaling Phase should not take more than five to ten minutes with trained players and facilitators.

When signaling is complete, Red players revert to their "opponent" roles, and play moves on to the Blue Investments and Actions Phase.

Blue Investments and Actions Phase

In the Blue Investments and Actions Phase, the Blue players deliberate on how they propose to posture, act, respond to, and/or hedge against everything they heard during the signaling briefs. Although this phase can be completed in five to ten minutes after the first few turns, it will take much longer at the start of the game because of how long it may take Blue players to decide how to "set the theater" in each AOR and work out their overall posture, given the resource constraints built into the default scenario. Some of this time will likely be occupied by trial-and-error experiments in which Blue players will start laying out their desired force posture only to find it is unaffordable and will require further trades and adjustments to their readiness and modernization plans.

Examples of the specific considerations Blue will need to integrate and make coherent decisions on include

- Current U.S. force posture and associated Readiness Levels in each
- Future capability development priorities (including National Tech Level and Critical Capabilities)
- > Future force modernization objectives

- > Future force structure objectives
- > U.S. relationships with NATO and the EU
- U.S. relationships with allies and proxies in each AOR
- Contiguous United States (CONUS) readiness posture
- > Resource priorities.

The Blue players are encouraged to walk around the game table during this phase and look at the Red player cards that have been signaled (the reason Red cards are placed face up on their placemats). This is not only to refresh what Blue heard in the signaling briefs but also to allow Blue to see the conditions, odds, and costs associated with those actions and investments, get a sense for the specific scope and scale of the actions to which they might need to respond, and see what Red's chances of success might be.

Once the Blue players have settled on their plan, they need to pay the U.S. readiness bill that resulted from the posture they have chosen. The game provides worksheets to assist Blue in calculating a readiness posture that helps pay for their other priorities within U.S. resource constraints, but the amount of work this involves is a key reason for providing Blue with a force development/management subject-matter expert to assist them in translating their strategic intentions into an affordable plan of action. Specific procedures for calculating U.S. readiness costs are covered in Chapter Fourteen.

The U.S. and NATO/EU players then play and resolve whatever Investment Cards they choose, in whatever order they choose. In each case, the costs and outcomes are paid and recorded as they occur (facilitated by the White Cell), which may affect, enable, or prevent subsequent investments and actions. As each Investment Card is played, the White Cell adjudicator should display the card on the projection screen for all play-

Some outcomes on Blue investment cards may be listed as "Private," which means the outcome may be kept between Blue and the White Cell if or until some condition is satisfied. Details on Private and Public events are provided in the "Public and Private Investments and Events" section.

When they have completed their investments, the U.S. and NATO/EU players then execute and resolve whatever actions they choose, in whatever order they choose. Remember that, for Blue, actions are intended to be mostly free-play. However Blue military forces could reasonably be employed (consistent with Blue strategy), Blue need only articulate their intentions, and it is the White Cell's job to accommodate by translating Blue's intentions into the game abstraction.

During the course of Blue actions for which a card has not already been defined in the scenario, Red players may respond by posturing (positioning) their forces as desired (deployment costs may apply; see Chapter Nine for specific rules). If Blue plays an Action Card, simply follow the conditions, response, and resolution instructions on the card. As each Action Card is played, the White Cell adjudicator should display the card on the projection screen for all players to see.

For all investments and actions, the only limiting factor for Blue (other than the rules and specific conditions on the cards) is resources; neither the U.S. player nor the NATO/EU player may run an RP deficit at any time during play, unless specifically authorized as part of the scenario or by the White Cell.

If later, during the turn, the U.S. player finds that they have no remaining resources to respond to a Red action or International Event, the U.S. player can appeal to the White Cell for an allocation of "emergency" funding (e.g., Overseas Contingency Operations) to cover the response.

Although they can be teaching points during the game, such allocations should be the exception. Whether to allocate, and how much to allocate, may also be decided by die roll. The White Cell will adjudicate.

Once all Blue investments and actions have been made, play shifts to the Red Investments and Actions Phase.

Red Investments and Actions Phase

In this phase, Red players choose which card or cards (of the three that they signaled in the Signaling Phase) they will play, and in what order. The play sequence among Red players is chosen either at random (by die roll) or by the White Cell (the latter method is used in the default scenario).

Each Red player decides what cards they want to play (if any) during their turn, and these are each played and resolved in sequence, facilitated by the White Cell. Cards may be played in any order, and—under the default scenario—Red players may decide, based on the outcome of preceding actions and investments, to stop playing cards at any point in the sequence.

As outlined earlier in the Red Signaling Phase instructions, under the default scenario, Red players have the option of choosing not to play any card during their Investments and Actions Phase. In other words, they may decide, based on events or actions that precede their own, against playing one or more of the cards they presented during signaling. This allows greater, more-informed freedom of action for Red, which also provides a more challenging scenario for Blue.

Adjudicating Red Actions

For each Action Card played, the Red player first announces the card number, located in the lower right corner of each card, which the White Cell adjudicator then uses to find the card file on the laptop and project it onto the screen for all participants to see. Next, the Red player summarizes their intentions for the action or investment, elaborating as appropriate to add useful detail and context to the outline provided on the card. Lessons learned during previous game sessions have shown that presenting a coherent backstory as each card is played greatly improves the quality of in-game discussions, helps Blue align their responses with their own strategy, and helps the White Cell frame the adjudication in context.

At this point, the White Cell typically talks the room through the resolution procedure. First, the conditions on the card and any response and resolution considerations that might assist the players are summarized. (The White Cell essentially translates conditions on the card into the players' frames of reference and player intentions into "game-speak.") The key task for the White Cell adjudicator here is to help players understand the likelihood of various outcomes and things they can do to make "the odds" more favorable to their success and to help them make informed decisions about how to proceed.

If there is an option for other players to respond, the White Cell will call for responses and talk responders through their options and what they need to do. This includes facilitating placement of appropriate FFs and marker chits on the game board and talking participants through the considerations and decisions they need to make.

Once players have stated their decisions, the appropriate player (usually the initiator of the action) rolls the die as directed by the White Cell, who then talks the room through the appropriate tables to determine the outcome.

When resolution is completed, the White Cell summarizes the action (in terms of what likely happened that led to the outcome) and updates the appropriate tracking marker chits.

Adjudicating Red Investments

For each Investment Card, resolution procedures are simpler because they do not normally call for another player to respond. The Red player announces the card number, the White Cell adjudicator projects it onto the screen, the Red player describes their intentions, and the White Cell walks them through the conditions and resolution procedures on the card. Similar to Blue investments, some outcomes on Red's cards may be listed as "Private," which means the outcome may be kept between the Red player and the White Cell if or until some condition is satisfied. Details on Private and Public events are provided in the "Public and Private Investments and Events" section. The RP costs are paid and/or the die is rolled, and the outcome is noted (those that are Public are revealed to the room, and those that are Private are kept between the acting player and the White Cell).

International and Domestic Events

At any point during the Red Investments and Actions Phase, the White Cell may inject one or more International or Domestic Events using the card decks provided for that purpose, and these are resolved in sequence by following the instructions on the cards, facilitated by the White Cell.

By default, which Event Cards are played and when they are played is up to the White Cell. A casual scan through the Event Card decks will reveal a range of positive and negative events with varying degrees of benefit or harm that can shift the balance and/or pace of play for one or more players. Typically, the White Cell uses these cards to shape play toward accomplishing the session's learning objectives, because they serve to compel certain actions or interactions by or between players. If things are happening too quickly or too slowly, or if one or more players are having too easy or too difficult a time, these cards serve to adjust the situation to keep the game session on track.

Event Cards can be injected at any time during play. An optional rule also provides for injecting events at random (by rolling a die at specific points during a game turn to determine whether an event will occur and then drawing one or more cards at random). In practice, we found this more likely to take a session off track, so we chose to leave the play of these cards up to the White Cell, guided by the session scenario's learning objectives.

Public and Private Investments and Events

Many Investment and Event Cards have the word Public or Private printed near the bottom. Some Private cards also have some conditions printed near the bottom that must be satisfied for the outcome or event to be considered private. For Public investments and events, the outcome is revealed to everyone. For Private investments, the fact that the investment is being made is public, but the outcome may be kept secret between the affected player and the White Cell. (For example, the rest of the world knows that a particular player is investing in certain technologies but might not know the outcome of those investments.) If no conditions are listed on a Private Investment Card, the outcome is assumed to be private. If there are conditions (typically, a die roll or some number of turns, or both) that are satisfied, the outcome remains private.

For Private Event Cards, if there are no conditions specified, or if the conditions are satisfied, the event itself and its outcome remain a secret between the affected player and the White Cell unless otherwise specified on the card or until those conditions are satisfied (typically on a later turn). Examples of events that may be private include technology or intelligence successes and failures.

As with player Action and Investment Cards, all public Event Cards are typically displayed on the screen by the White Cell adjudicator as the game master reads the card to the players. The adjudicator then talks the room through the adjudication steps and considerations listed on the card.

Other Adjudication Considerations

Because of the potential complexity and variety of conditions, procedures, and decisions associated with player actions and the discussions that could ensue, the Red Investments and Actions Phase typically takes the most time during a turn (upward of 30 minutes or more for trained players and facilitators, depending on the number and complexity of ac-

When each Red player's investments and actions have been resolved, play shifts to the Annual Resources Allocation Phase.

Annual Resources Allocation Phase

During this phase, some number of RPs is added to each player's existing resource pool (budget). The amount added each turn is specified in the scenario, but it may be adjusted by the outcomes of various Action, Investment, or Event Cards. Note that RPs are added to the existing pool and that RPs not spent on the current turn carry over to subsequent turns. Players may thus save up for more-expensive future actions or investments at the price of reducing the pace and/or scope of actions or investments during the current turn.

In addition, the baseline per-turn allocation for the U.S. player may change each turn as a result of budget variation. The U.S. player rolls a D10 and consults the DoD Budget Variation table (Table 3.1), which is also found on the DoD player placemat.

The resource allocation for that turn is the baseline allocation specified in the scenario plus the number of RPs in the column corresponding to the die roll (which could be a negative number). This phase usually takes less than a minute, and play then shifts to the State-of-the-World Summary.

Table 3.1. DoD Budget Variation

DOD BUDGET VARIATION

Roll	0–1	2–4	5–7	8	9
Change in Allocation	-2 RP	–1 RP	no change	+1 RP	+2 RP

State-of-the-World Summary Phase

During this phase, the White Cell provides a brief summary of the notable actions, events, and outcomes that occurred during the turn. This is expressed in real-world terms, as part of the coherent backstory of the game as it has unfolded.

Optional Play Sequence Rules

Activation Markers and Red Right of Refusal

Under the default scenario, when Red players lay the three cards they have chosen to signal face up on their placemats during the Signaling Phase, they may choose not to execute these cards later, during their Investments and Actions Phase. There is a set of activation markers in the game set (small white chits with the word Activate? on one side and the word Yes or No on the other). If the scenario calls for restraining Red player freedom of action by holding them to their intentions during the Red Signaling Phase, an optional rule compels Red players to place one activation marker on each card when they place the cards on their placemat during the Signaling Phase, with the Activate? side face-up and the side with their intention face-down.

During the Red Investments and Actions Phase, Red players must then play the cards they had chosen to activate by marker placement, regardless of outcomes that have occurred up to that point, as long as the conditions on the card can be met.

This rule significantly constrains Red's freedom of action and simplifies the scenario for Blue.

Random Events

Under the default scenario, the White Cell injects International and Domestic Events into the game at points of their choosing. If a scenario calls for many random events, then the White Cell can roll a die at predesignated or ad hoc times during the play sequence to determine whether an event will occur and then draw a card randomly from the appropriate deck. The decks themselves could be chosen at random, and they also could be shuffled together into one or more aggregate decks.

Random Player Sequence

Under the default scenario, the White Cell selects the Red Signaling Phase and Red Investments and Actions Phase player sequence. This sequence could be randomized by die roll. Each Red player rolls a D10, and the player sequence is in ascending or descending order based on the outcomes (the White Cell determines the sequence in the event of ties).

4. Military Forces, Capabilities, and Capacity

In Hedgemony, **armed forces** (hereafter referred to simply as **forces**) are abstracted as some number of Force Factors (FFs) that represent the various military force components (e.g., ground, sea, air, cyber, special operations) that players can use to execute their strategies. In play, these FFs are represented by forces counters in one of four denominations: 1, 2, 5, and 10. An example forces counter for the U.S. player is shown in Figure 4.1 and described in the next section, and the counters for all player forces are identical in format.

There is no explicit differentiation between different types of forces in Hedgemony (i.e., ground, sea, air, space, cyber, special forces are all represented simply as FFs). The main reason for this is simplicity, given the teaching objectives of the game; explicit force types were considered an unnecessary detail that would complicate game mechanics and slow the pace of play. For a given action or event, players will state or are assumed to understand the types of forces that would likely be available or involved and are expected to play accordingly. The White Cell will advise and adjudicate how the country-specific conditions surrounding an action or event would likely affect how many and which types of forces would be available to participate.

How to Read the Forces Counters

The example counter shown in Figure 4.1 represents two U.S. FFs at Mod Level 3.

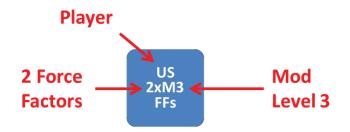
The number to the left of the *x* denotes the number of FFs the counter represents—an abstraction of the force's capacity (i.e., force size). Think of this number as a representation of the number of formations, troops, ships, aircraft, and so on. The M and the number to the right of the x denote the Mod Level—an abstraction of the capability level of a force. Think of the Mod Level as a representation of the force's technological sophistication (literally, how modern its capabilities are). The x represents a multiplication sign (e.g., two times M3, or two M3 FFs).

Relationship Between Capability and Capacity

There is an important situational relationship between force capability and force capacity. In many noncombat interactions between forces, including posturing and certain types of exercises and gray zone activities, the technological capabilities of the forces involved are not as important to the outcome as the size of the force present in the AOI or AOR. In other actions, and particularly in most combat interactions, technology is a "force multiplier" that increases the capability of a given-sized force.

In Hedgemony, the relationship between capability and capacity is abstracted as some number of Combat Factors (CFs). This number is calculated as a function of the number of FFs and their Mod Level (the

Figure 4.1. Example Forces Counter



procedure for which is described in Chapter Ten of this rulebook). The higher a force's Mod Level (and Readiness Level, in the case of U.S. forces), the more CFs are generated per FF. Thus, in situations where capability has a significant impact on outcomes, it is possible for a smaller, more modern force (of fewer FFs but of higher Mod Level) to overmatch a larger but less modern force.

On the other hand, there are situations where the size of a force (i.e., the number of "boots on the ground," which, in the game, is represented as the number of FFs) matters more to an outcome than the force's combat capability (which, in the game, is represented by the number of CFs a force can generate, as determined by its size, Readiness Level (for U.S. forces), and Mod Level). Players need to understand these differences when choosing the types of forces they want to develop and what actions to take or respond to, as well as when deciding how much force to allocate to achieve a favorable outcome or to avoid an unfavorable one.

The scenario defines how much it costs players, in resources, to modernize existing forces to a higher Mod Level, as well as how much it costs to procure new forces. In either case, the higher the intended Mod Level, the greater the cost in resources. The procedures for modernization and **procurement** are detailed in Chapter Thirteen.

National Technology Level

The measure of technological capability a nation can deliver to its forces is abstracted in Hedgemony as a player's National Tech Level. Think of this as a relative measure of a nation's science and technology (S&T) and research and development (R&D) capability and capacity. The National Tech Level represents the upper limit for how modern a player's forces or capabilities can be at any point in the game. A player may not upgrade their Force Mod Levels or Critical Capability Mod Levels (explained below) above their National Tech Level.

Players may invest to upgrade (increase) their National Tech Level, and there are scenario-specific rules for how much it costs, in RPs, to do this; how hard it is to do so (i.e., the chances of success or failure); and how long it will take to see the change if the upgrade succeeds. The scenario may specify constraints on a player's ability to upgrade their National Tech Level relative to other players' National Tech Levels (e.g., a nation that does not lead in Tech Level may find it easier to upgrade than a nation with the highest Tech Level among all players). There are also events that may occur that could either increase a player's National Tech Level or affect a player's ability or cost to do so.

Player Investment and Domestic Event Cards typically define how and the conditions under which players' National Tech Levels can change during the game and how much it costs in RPs.

Critical Capability Modernization Level

Hedgemony uses Critical Capabilities to represent key asymmetrical capabilities that a nation or actor can invest in to achieve overmatch with an adversary in specific capability areas. Examples of asymmetrical capabilities in the real world include elite special operations forces, precision-guided munitions, long-range artillery, long-range missile systems, tactical and strategic air forces, air and missile defenses, undersea naval forces, sea-based naval air forces, cyber forces, and stealth technologies. Critical Capabilities are used in Hedgemony to explicitly differentiate between specific differences in the mix of military capabilities between players' forces.

Critical Capabilities are defined and assigned to players as part of the scenario design. In the default scenario, the Critical Capabilities are listed next to their tracking boxes on the player placemats and on the Starting Conditions summarized on each player's freestanding screen. They are also listed in the appendix of this rulebook. The Critical Capabilities defined in the default scenario are

- > command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR)
- ➤ Long-range fires (LRF)
- ➤ Special operations forces (SOF)
- ➤ Integrated Air and Missile Defense (IAMD)
- Nuclear forces.

The U.S. player typically is given more Critical Capabilities than the Red players. Because U.S. forces typically are called on to prepare for multiple threats around the world against different types of adversaries, a key learning objective for Blue is understanding the challenges associated with managing the various investments needed to develop, manage, and operate forces to "offset" or overmatch adversaries' capabilities on a global scale.

How Critical Capabilities affect play is determined by conditions specified on the card in play. If an action or event calls for specific Critical Capabilities, the difference in Critical Capability Mod Level between the players involved translates into a die-roll modifier in favor of the player with the higher Mod Level. If the difference in Critical Capability Mod Level is high enough, it could be impossible for one player to win or the other player to lose. Thus, Critical Capabilities provide the means for players to focus investments on areas of specific capability overmatch (or parity), either to enable a player to execute a campaign of specific actions that highlight those capabilities or as a hedge against an adversary's ability to employ them against their own strategy. Chapters Eight and Ten detail how Critical Capabilities affect adjudication of interactions between forces.

5. Resources

All players receive a pool of resources (in units of Resource Points [RPs]) used to pay various force development, readiness (U.S. only), **deployment**, employment, and investment costs as specified in the game rules or on the cards in play. This pool is replenished each turn, although the per-turn allocation may be affected by various rules, actions, or events during play.

For the U.S. player, the resource pool is a rough abstraction of the U.S. defense budget, and its starting size and per-turn allocation are designed specifically to force tough trades among how active U.S. forces can be around the world, the force's current readiness levels and capabilities, and the force's future capabilities and capacity.

For non-U.S. players, the resource pool is designed mainly to constrain the range and frequency of their actions. Non-U.S. players do not have to pay for force Readiness Level, and their deployment costs are simpler because the game was designed to focus on the U.S. player's learning objectives. Therefore, non-U.S. player resource pools are much smaller than that of the U.S. player.

Unless otherwise specified on cards in play, RPs may be needed

- To deploy, modernize, or procure forces
- > To upgrade National Tech Level or Critical Capability Mod Levels

To pay costs associated with playing and/or resolving an Action, Investment, or Event Card.

Resources also represent opportunities for players to bargain with, influence, and shape the capabilities, capacity, and actions of partners (proxy forces) and adversaries during play. Specific procedures for how RPs are used are detailed throughout this rulebook and on the cards themselves.

The resource pools assigned to all players in the default scenario make it challenging to modernize all Critical Capabilities and significant portions of forces at the same time. Likewise, attempting to simultaneously modernize forces, modernize Critical Capabilities, *and* procure forces is generally unaffordable for all players under the default scenario. Again, this was a deliberate design decision to force players to make tough choices between current and future military **operations**, capabilities, and capacity.

Players may never spend more RPs than they have in a given turn unless explicitly defined in the scenario or permitted by the White Cell.

6. Influence and Victory Conditions

Every wargame has one or more metrics to measure players' progress toward a set of Victory Conditions. Hedgemony has only one such metric: Influence. Think of Influence as a representation of a country's or region's standing, capability, and capacity to shape events and outcomes at home and around the world. Influence in Hedgemony is measured in units of Influence Points (IPs). Each scenario specifies the number of IPs players start with (in the Starting Conditions), and some number of IPs is also specified in each player's Victory Conditions.

Victory Conditions may be expressed in either absolute terms (e.g., acquire some number of IPs) or relative terms (e.g., get within x IPs of some other player).

Starting and Victory Conditions for the default scenario are listed in the appendix of this rulebook and are also summarized on a freestanding screen placed at the head of each player's placemat.

Because the outcomes of most Action and Event Cards and some Investment Cards typically include changes in IPs for one or more players, as players take actions and make investments during the game, their tallies of IPs change accordingly, and these are noted by the White Cell as they occur by placing circular tracking marker chits in the appropriate tracking boxes on the periphery of the game board.

All of the above notwithstanding, as currently implemented in the game, Influence is a highly abstract and generalized metric that provides little

more than an artificial quantity by which to track the relative "success" of player actions and responses. Not only is there no formal or scholarly basis for such a metric, but such tracking is secondary to the purpose for which Hedgemony was created—that is, to teach U.S. strategy and policy professionals about how the trade space of key planning factors in force development, management, posture, and employment could be affected by different defense strategies. Those factors are already explicitly represented in the game in each player's total remaining RPs, National Tech Level, force Readiness Level, Force Mod Level, and Critical Capabilities Mod Levels; each player's force posture/presence; and each player's sustained pace of action over a series of game turns.

How players' strategies affect the individual and collective trends of these factors over the course of several turns is the main teaching point in the game, as designed. Influence is an *adjunct* measure that provides players with a motivation for acting or reacting and a sense of how the outcomes of their actions and responses have fared relative to those of the other players.

Thus, true "victory" in a Hedgemony game session is achieved by accomplishing the session's learning objectives, not by tallying up IPs to see who "won."

7. Action, Investment, and Event Cards

There is an Action and Investment Card deck and a Domestic Event Card deck for each player in the game, as well as an International Event Card deck that is applicable to all players. Collectively, these card decks are the embodiment of a session scenario.

A key tenet of Hedgemony's game design was to provide live, on-the-fly adjudication during play, with the least possible disruption to player discussions or session learning objectives. To facilitate this, we chose to incorporate action- and event-specific adjudication procedures and probabilities on every card. The cards are also intended to be projected onto a screen visible to all players, so when a player takes an action or an event occurs, everyone can see the context, the conditions, and the probabilities associated with the outcomes. Think of each card as a scenario vignette and each card deck as a representative set of such vignettes that, together, help define the scenario. That each card both summarizes a situation and the actors involved and explains how the actors can resolve the situation is one of the features that makes Hedgemony so adaptable to new scenarios. How the resolution of cards is adjudicated is detailed in Chapter Eight. How to modify or create new scenarios is described in the appendix.

Understanding the Player Action and Investment Cards

For the Red players, the Action and Investment Cards define a due-diligence variety of actions and investments that those countries could plausibly take as part of the scenario. It is each Red player's job to use these cards as a framework around which to craft both their intentions in the game (i.e., their campaign objectives) and a coherent story to provide context for their actions and investments consistent with their strategy.

There are relatively fewer Action and Investment Cards for U.S. and NATO/EU players than there are for Red players because the cards exist only for actions and investments that require structured adjudication. They are *not* meant to either suggest or constrain Blue players' actions. Hedgemony was designed to accommodate and encourage free play for both the U.S. and NATO/EU players, meaning that the Blue **side** should feel free to consider and propose *any reasonable action* that could be taken by military forces in connection with their strategy. It is up to the White Cell to find a way to accommodate and adjudicate Blue players' proposed actions in the game during play.

For all players, as discussed earlier, considerations for how to adjudicate different types of actions or events have been quantified in advance, as part of scenario development, to facilitate adjudication on the fly by the White Cell using procedures outlined in Chapter Eight. However, the Action and Investment Cards are *only a foundation*—they generally (and intentionally) lack situation-specific context. It is each player's job to *elaborate on* the Action and Investment Cards each time they play one and to build an appropriate amount of additional context to "make it real" in the context of the situation at that point in the game (example cards are shown and described in this section).

A quick scan of the player Action and Investment Card decks will show that they represent a variety of actions on a scale of escalation and scope, such as diplomatic and economic actions, noncombat exercises, gray zone actions, and actual "force on force" combat operations. A similar scan through the Investment Card decks shows the types of investments players can make to adjust the capability and capacity of their military forces. Notice also the conspicuously small number of Blue Action Cards, because Blue is intended to be free-play and because Blue will

likely be reacting to a variety of Red player actions and investments. The specific rules and procedures for executing and adjudicating these actions and investments are detailed in Chapter Eight.

Some sample Action and Investment Cards are shown in Figures 7.1–7.3. The first card (Figure 7.1) represents a military action: a PRC gray zone action in the U.S. Indo-Pacific Command (INDOPACOM) AOR against a non-U.S. ally. The second card (Figure 7.2) represents a non-military action: a PRC diplomatic and economic initiative. The third card (Figure 7.3) is also a nonmilitary action: a PRC investment in island infrastructure in the South China Sea (SCS).

Although more-detailed instructions for how to read and interpret the conditions and adjudication procedures on Action and Investment Cards will be provided in Chapter Eight, here we want to highlight important characteristics of all Action and Investment Cards.

Figure 7.1. Sample Player Action Card 1

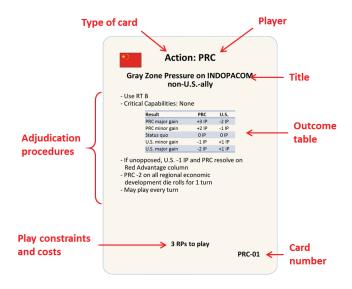


Figure 7.2. Sample Player Action Card 2

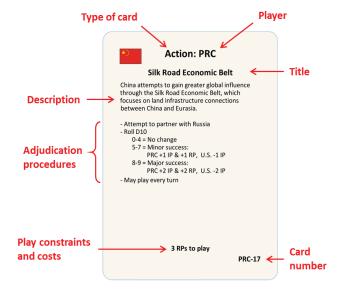
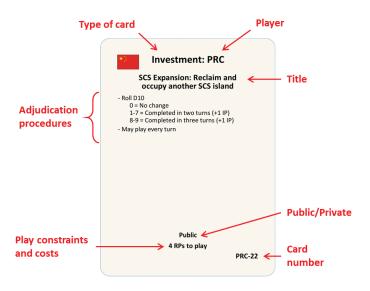


Figure 7.3. Sample Player Investment Card



The content on all of these cards follows the same basic template:

- The type of card and player are indicated at the top, to the right of the player's flag icon.
- The title briefly characterizes the action.
- The body of text in the center of the card, which may outline the situation, includes instructions to resolve the action/event on one of the baseline resolution tables and an action/event outcome table, or may explicitly specify the die-roll outcomes on the card).
- The body also may outline conditions for play.
- > At the bottom center of the card may be additional constraints and the cost to play the card, in RPs (more about this in later sections).
- The card number at the bottom right of the card is announced when playing the card so the White Cell can find it and display it on the projection screen for everyone to see.

Notice that these cards are only sparse outlines, with virtually no context except for the type, scale, and/or scope of the action and the procedure for how to resolve it in the game. It is the job of the players to elaborate on this outline (assisted by the White Cell) when they play an Action or Investment Card by providing additional context, such as where the action is taking place, what is happening, what types of forces are involved, and what those forces are doing. In other words, players should provide the coherent backstory behind the action, consistent with their strategy and the world events unfolding at that point in the game.

Understanding the International and Domestic Event Cards

Action and Investment Cards are normally controlled by each player. International and Domestic Event Cards, on the other hand, are normally controlled by the White Cell in alignment with the specific scenario and session learning objectives. Event Cards may also be introduced at random using die rolls, but this, too, should be by prior arrangement as part of the scenario.

How often these events may occur is usually a function of both scenario design and how a game is unfolding. If the types of interactions that were envisioned in the scenario as part of the session learning objectives have not occurred within the desired time frame or pace in the game, then the White Cell can inject Domestic and/or International Events to force such interactions on a national, regional, or global scale, as appropriate. Similarly, if the dice have not been "friendly" to the game's learning objectives (disproportionately skewing play either positively or negatively in ways detrimental to the session learning objectives), then an event can be injected to accelerate, slow down, or adjust play (i.e., provide a means for the White Cell to "put their thumb on the scale," but in context with the scenario).

Event Cards tend to have more contextual information on them than the player Action and Investment Cards do because they are designed to be more self-explanatory (either read by a facilitator or drawn at random following a die roll and read by the drawing player).

Event Cards may occur at any time during the Signaling and Action phases of a game turn (described in more detail in Chapter Three).

A quick scan through the Event Card decks will provide a good overview of the types of contingencies that could occur without warning and that players might need to prepare for or hedge against. Some sample Domestic and International Event Cards are shown on the following page (Figures 7.4-7.6).

The format for Event Cards is similar to that of Action and Investment Cards, but Event Cards, as mentioned earlier, are more verbose, providing more context because players are not expected to build their own story around the event. If necessary, context or backstory is provided by the White Cell. Like Action and Investment Cards, Domestic and International Event Cards have a number in the bottom-right corner that the White Cell will used to find and present them on the projection screen to facilitate play, discussion, and adjudication.

Domestic Events usually affect a single player, either positively or negatively, depending on the card. International Events usually affect several and sometimes all players. As stated earlier, Event Cards are usually handled by the White Cell and may be injected at any time during play.

The primary purpose of the Domestic Event Cards is to adjust the pace or balance of play between players.

The primary purpose of the International Event Cards is to challenge players with hard choices or interactions that may have been avoided up to this point in the game or that force players to address specific session learning objectives at specific points during play.

Detailed instructions for how to interpret and adjudicate events are provided in Chapter Eight. How and when cards are played are described in Chapter Three.

Public and Private Actions, Investments, and **Events**

Glancing through the card decks, the reader will notice the words "Public" or "Private" at the bottom of some cards. This denotes whether the outcome of the action or event should be known to all the players (Public) or known only to the owning player and the White Cell (Private). There may be additional information at the bottom of the card that describes the conditions under which the card or outcome may be private.

For Private investments, the fact that the investment is being made is public, but the outcome may be kept secret between the affected player and the White Cell (for example, the rest of the world knows a particular player is investing in certain technologies but might not know the outcome of those investments).

For Private Action or Event Cards, if there are no conditions specified, or if the conditions are satisfied, the action or event itself and its outcome remain a secret between the affected player and the White Cell unless otherwise specified on the card or until those conditions are satisfied (typically on a later turn). Examples of events that may be private include technology or intelligence successes and failures. In cases of ambiguity, the White Cell will resolve on a case-by-case basis.

For all cards whose outcome is determined to be private, the player or the White Cell should shield the roll from the other players so that only the affected player and the White Cell know the result.

Figure 7.4. Sample Domestic Event Card 1

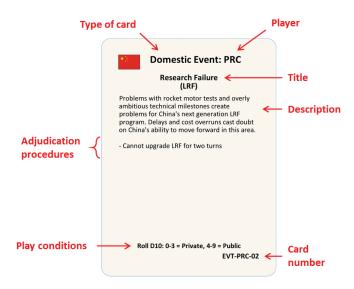


Figure 7.5. Sample Domestic Event Card 2

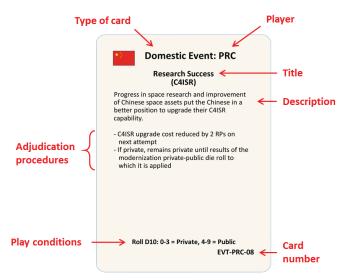
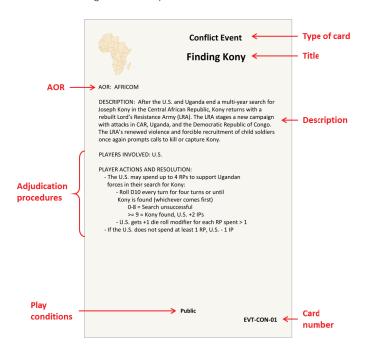


Figure 7.6. Sample International Event Card



8. Adjudication

Adjudication is the process of resolving the outcomes of player actions and interactions, as well as game events. This process is facilitated throughout a game session by the White Cell and normally involves consulting the rules in this rulebook, as well as conditions and procedures specified on the Action, Investment, and Event Cards as they are played.

For some actions, the adjudication procedure is represented entirely on the card in play, including whether die rolls are called for and the action/ event outcome for each die roll. For other actions, a resolution table is used to determine the favor and the magnitude¹ of the probability outcome from a die roll (e.g., Status Quo, Blue Minor Gain, Red Major Gain), and then a table on the card is consulted to determine the action outcome from the probability outcome. In all cases, the card in play specifies which procedure should be followed, and that procedure is facilitated by the White Cell.

A ten-sided die (D10) is used, when called for in the rules or on the card in play, to determine an outcome based on the precalculated scenario-specific probability distribution associated with each action or event. The game rules, the card in play, or the White Cell will determine who rolls to resolve an action or event.

Adjudication in Hedgemony takes place live (i.e., on the fly, during play). As an action or event unfolds (if the event is public), the relevant card should be projected onto a screen that is visible to all players and should be summarized by the White Cell so that everyone can understand and consider the context of the action or event, any probabilities associated with possible outcomes, the resolution procedure, and which player has the "lead" for choosing or rolling a die to determine the outcome.

Actions, investments and international events marked Private are shown to all the players, but the outcome may be resolved in secret between the affected player and the White Cell by hiding the die roll from the other players. If conditions for Private actions, investments, or events are listed at the bottom of the card, those conditions must be met for the outcome to be considered private. Private domestic events injected by the White Cell are typically handed directly to the affected players (i.e., the event itself is considered private).

Once the action or event has been resolved, the White Cell makes or directs required adjustments to forces involved on the game board and to any chits used to track game status. For public actions, investments, and events, the players and the White Cell also should briefly discuss the likely backstory associated with the outcome (i.e., what the action, interaction, or event represented and what likely happened in the "real world"), and play then moves on to the next action or event.

In Hedgemony, there are only two types of adjudication procedures: those needed to resolve interactions between forces (both combat and noncombat) and those that apply to everything else (including investments and nonmilitary actions and events). Which set of procedures is called for depends on the conditions specified on the card in play.

Although specific procedures for calculating and resolving combat and noncombat interactions between forces are detailed in later sections, all the reader needs to know at this point is that resolving interactions between forces in Hedgemony is either a one-step or two-step process. If a resolution table is specified as a condition on the card (usually Combat Resolution Table A [CRT A] or Resolution Table B [RT B]) this invokes the following two-step process:

- > Step 1: Determine the probability outcome using the resolution table and the conditions specified on the card in play (one of five possible outcomes: Major or Minor Gain for Blue or Red, or Status
- > Step 2: Use the probability outcome from the resolution table to look up the action or event outcome using the table printed on the

The context provided by the players (when they describe the nature of the action) and the conditions specified on the card determine whether the action involves combat. The conditions specified on the card also indicate the extent to which force capabilities matter to the outcome (and how such considerations affect the die roll) or whether the probabilities are simply calculated based on the ratio of forces (i.e., the ratio of FFs) between participants. Ambiguous situations will be clarified or resolved by the White Cell.

Adjudication of all other interactions and events in Hedgemony is a straightforward, one-step process—simply follow the instructions on the card. In these cases, an external resolution table is not specified—the card will supply all conditions, procedures, and outcomes for resolving the interaction or event. Again, the White Cell will clarify or resolve any ambiguous situations.

The Baseline Resolution Tables

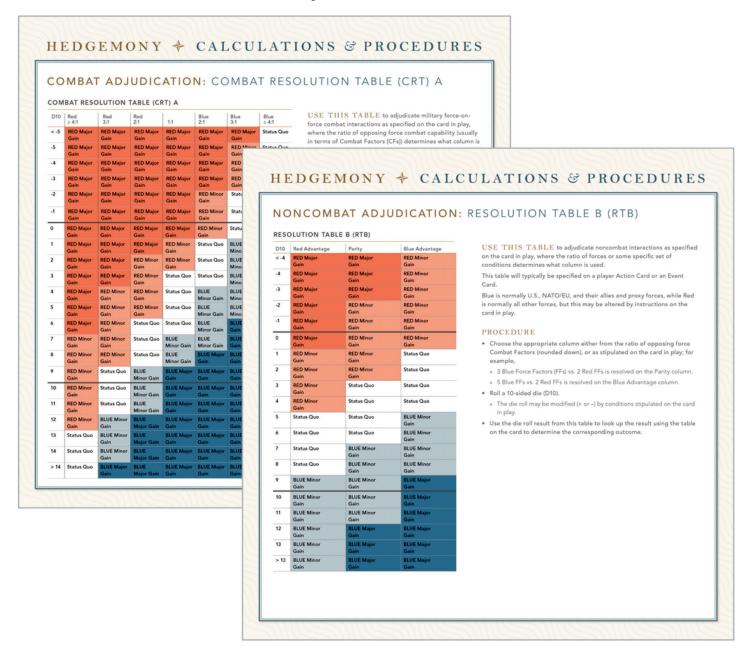
Figure 8.1 shows the two baseline resolution tables on their respective combat and noncombat Calculation and Procedures mats (larger figures of these tables are provided in Chapters Eleven and Twelve of this rulebook). CRT A is, as the name implies, used for resolving combat interactions between forces or interactions whose outcomes depend on differences in military capabilities. RT B is used for resolving noncombat interactions, or interactions whose outcomes depend only on the ratio of forces.

Both tables are "classic" resolution tables, similar to those that have been used for decades to adjudicate wargames. Each table provides a baseline probability distribution that can result in one of the following five probability outcomes, based on the roll of a D10:

- ➤ Red Major Gain
- ➤ Red Minor Gain
- ➤ Status Quo
- ➤ Blue Minor Gain
- ➤ Blue Major Gain.

These tables are the first step in a two-step process to resolve an action or event. When the rules or adjudication procedures call for using these tables, a die is rolled, and these baseline tables indicate which players gained and which lost and by how much (if any). This is the probability outcome. Usually, the final step is to then consult the card in play to determine the outcome of the action or event for a given probability outcome. Depending on information on the card, IPs and/or RPs may be added to or subtracted from one or more players' totals. Any other benefits or constraints the adjudication procedures or rules may impose should also be applied to the players' totals as they occur. Detailed procedures for how to use these tables are provided in Chapters Eleven and Twelve of this rulebook.

¹ Favor refers to which player benefits (i.e., in Red's favor or in Blue's favor), while magnitude refers to the size or scale of the success or setback (i.e., Minor Gain or Major



How Force Capacity and Force Capability Affect Outcomes

In Chapter Four, we emphasized that there is an important relationship between capability and capacity. Here, we elaborate. To understand how to select *which* actions to play or respond to, *how* to act or respond, and which potential actions and events to *hedge* against, players need to understand how the relationships between relative force size (e.g., ratio of forces or FFs), relative force combat capability and capacity (e.g., ratio of CFs—a function of the number of FFs, their Readiness Level [for U.S. forces],² and Force Mod Levels), and relative asymmetrical capability levels (i.e., difference in Critical Capability Mod Levels) can affect the outcomes of interactions between military forces.

The simplest—relative force size (ratio of forces)—is the oldest and least efficient way to overmatch an adversary. Each cardinal increase in ratio of forces (from 1:1 to 2:1, for example) translates to a "column shift" on a baseline resolution table. A quick glance at the tables reveals that the changes in the ratio of forces shift or skew the probability distribution toward more-favorable outcomes for the player with overmatch. Relative force size is the least efficient way to achieve overmatch in Hedgemony because this ratio is always *rounded down*, and players need to consider what happens as the number of FFs involved in the conflict increases.

For example, assume a Red player commits two FFs to a noncombat action (say, a gray zone operation) that specifies using RT B.

² The procedures for calculating the impact of Readiness Level on U.S. Combat Factors are described in Chapter Ten.

- The U.S. player must respond with at least four FFs to shift to the "Blue Advantage" column on RT B.
- The Red player can then escalate and commit a third FF, which restores the ratio to parity (ratio, rounded down).
- Now, the U.S. player must commit an additional two FFs (for six total) to achieve a Blue advantage on the die roll.

When force capacity is the dominant factor, it negates capability advantages (e.g., from having more modern forces), and the conflict is biased toward Status Quo outcomes because it is relatively easy for one side to avoid an adversary advantage.

Now, consider combat or noncombat interactions where combat capability and capacity factor in the outcome. In these situations, the ratio of CFs and CRT A is used. Here, differences in force modernization are important. Figure 8.2 shows the mat used to calculate the number of CFs from a given number of FFs. Although we cover the detailed procedures and conditions for doing the calculations in Chapter Ten, for now, simply note the impact of Force Mod Level on the number of CFs generated from a given number of FFs.

Consider the following example:

A Red player chooses an incursion action that calls for resolution on CRT A and commits three FFs at Mod Level 2.

Figure 8.2. How Combat Capability Relates to Force Capacity

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

COMBAT FACTORS FROM FORCE FACTORS

IN-THEATER COMBAT FACTORS

Mod Level-to-Combat Factor Calculation for Force Factors Already in Theater or Flowed from **Adjacent Theaters**

Force	Resulting Com Modernization				tors B	ors Based	
Factors	1	2	3	4	5	6	7
1	1	2	3	4	5	6	7
2	2	4	5	7	8	9	10
3	3	5	7	9	11	12	14
4	4	7	9	12	14	16	18
5	5	8	11	14	17	19	22
6	6	10	13	17	20	23	26
7	7	11	15	19	23	26	30
8	8	13	17	22	26	30	34
9	9	14	19	24	29	33	38
10	10	16	21	27	32	37	42
11	11	17	23	29	35	40	46
12	12	19	25	32	38	44	50
13	13	20	27	34	41	47	54
14	14	22	29	37	44	51	58
15	15	23	31	39	47	54	62

READINESS IMPACT ON COMBAT FACTORS

Baseline Combat	Resulting Combat Factors Based on Readiness Level					
Factors	90%	80%	70%	60%	50%	
1	1	1	0	0	0	
2	1	1	1	1	0	
3	2	2	1	1	1	
4	3	3	2	1	1	
5	4	3	2	2	1	
6	5	4	3	2	1	
7	6	5	4	3	2	
8	7	5	4	3	2	
9	8	6	5	4	3	
10	9	7	5	4	3	
15	13	10	8	6	4	
20	18	14	11	8	6	
25	22	17	13	10	7	
30	26	20	16	12	9	
35	30	23	18	14	10	
40	35	27	21	16	12	
45	39	30	23	18	13	
50	43	33	26	20	15	

CONUS-SOURCED REACTIVE **COMBAT FACTORS**

Mod Level-to-Combat Factor Calculation for Reactive Force Factors Deployed from CONUS

Force		ulting derniza			tors B	ased o	on
Factors	1	2	3	4	5	6	7
1	0	1	2	3	4	5	6
2	1	2	3	4	5	6	7
3	2	3	5	6	8	9	11
4	3	5	6	9	11	12	14
5	3	6	8	10	13	15	17
6	4	7	9	12	16	18	20
7	5	8	11	14	18	20	24
8	6	9	12	16	20	24	27
9	6	10	14	18	23	26	30
10	7	12	15	20	25	29	33
11	8	12	17	21	28	32	36
12	9	14	18	24	30	35	40
13	9	15	20	25	32	37	43
14	10	16	21	27	35	40	46
15	11	17	23	29	37	43	49

NOTES: The table above is also used to calculate the CFs for U.S. FFs whose Readiness has been "bought back" to a higher level on the same turn they are employed in an action involving CRT A.

USE THE TABLES AT LEFT to determine the Combat Factors (CFs) that result from a given number of Force Factors (FFs) at a given Modernization Level (usually for resolution on Combat Resolution Table A (CRT Al).

If the forces are of different Readiness Levels, calculate the CFs for each Readiness Level separately.

NON-U.S. PLAYER PROCEDURE

- · Subtotal the FFs involved in the action by Modernization Level
- Further subtotal these by source (originating within theater or an adjacent theater).
- · For each subtotal originating in theater, look up the resulting CFs using the In-Theater table.
- · For each subtotal flowing from adjacent theaters, calculate the CFs using the In-Theater table, but divide the result in half (rounding up).
- · Sum all of the resulting CFs.

U.S. PLAYER PROCEDURE

- · Subtotal the FFs involved in the action for all unique combinations of the following:
 - » Source (in theater, adjacent theater, or CONUS)
 - » Readiness Level
 - » Modernization Level.
- · For each subtotal, look up the resulting CFs using the appropriate table.
 - » For each subtotal flowing from adjacent theaters, calculate the CFs using the In-Theater table, but divide the result in half (rounding up).
- For each group of CFs derived from FFs with less than 100% Readiness, use the table at left to look up the resulting CFs.
- · Sum all of the resulting CFs.

For each group of U.S. CFs derived from FFs with less than 100% Readiness, using the tables above, look up the CFs that correspond to the appropriate Readiness Level in the table at left.

- ➤ Blue responds with two FFs at Mod Level 4.
- Assuming the conditions for using the In-Theater Combat Factors table are met in this example and no other modifiers apply, this action yields the following result:
 - ➤ three FFs at Mod Level 2 = five Red CFs
 - > two FFs at Mod Level 4 = seven Blue CFs.
- > This means (ratio of CFs, rounded down) roll on the 1:1 column on CRT A.
- ➤ Red would need to commit six more Mod Level 2 FFs (nine total FFs) to achieve a ratio of 2:1 against Blue (14 CFs would be needed).
- ➤ Blue would need to commit only two more FFs (four total) to achieve a ratio of 2:1 against Red (ten CFs would be needed).

The key point here is that a smaller, more capable (more modern) force can both offset a larger, less capable (less modern) force and achieve overmatch or be used as a hedge in an **economy-of-force**—like **mission**. This makes force modernization more efficient than growing force structure (i.e., increasing force size, buying more FFs) because the more modern a force is, the more CFs it generates for a given number of FFs. Another reason modernization is more efficient is that it applies to specific FFs, not to the entire force. This means that a player can choose to modernize a portion of their force, focusing either on a particular region or mission set or to forces deployed against a specific adversary. The goal can be to hedge, to overmatch, or both, depending on the situation and the strategy.

Finally, continue with the previous example and assume that an additional condition on the card Red played specified that Red LRF and Blue IAMD Critical Capability Mod Levels factored in the outcome.

- Assume Red's LRF Mod Level was 2, and Blue's IAMD Mod Level was 4.
- ➤ Critical Capabilities affect outcomes by modifying the die roll on the resolution table by the difference between the best Blue Critical Capability and the best Red Critical Capability (in this case, the two given). The result is 4 − 2 = 2, which means 2 is added to the die roll. Note that the impact of Critical Capabilities on the outcome is always calculated as the difference between best Blue and best Red (i.e., Blue minus Red) unless otherwise specified on a card.
- As a rule of thumb (given the baseline distributions we built into CRT A), a die-roll modifier of two is *roughly equivalent* to a column shift on the table.
- ➤ This means that a smaller, more modern force with an asymmetrical capability advantage is able to achieve two-to-one overmatch over a larger, less modern force.
- And, because the die-roll modifier is independent of force or capability ratio, it shifts the outcome probabilities toward the player with overmatch (in this case, Blue).

This makes improving asymmetrical capabilities (Critical Capability Mod Level) a *very* important investment for all players. This is particularly true if a player can choose actions that emphasize their asymmetrical capability advantage over an adversary's *and* that work as a hedge against an adversary's attempt to do the same. This is because Critical Capability overmatch achieves a die-roll modifier *independent of the ratio of forces, how modern the forces are, or the ratio of CFs.* Again, a smaller, more capable force may be able to achieve overmatch over a larger, less capable, less modern one, *or* it may be able to prevent adversary overmatch under similar conditions.

Action and Event Outcomes

There are several ways an action or event may be resolved, depending on context, but the variety of potential outcomes is intended to derive logically from the context. Some actions and events involve probabilities and a die roll. Others simply involve satisfying one or more conditions (usually including paying the cost in RPs).

For those actions or events involving probabilities, if the action or event involves conflict between armed forces, the probability outcomes typically involve Major or Minor Gains for one or another participant, or Status Quo. **Status Quo** is the "catch-all" outcome that represents the current state of affairs in the AOI, the AOR, or the world. It signifies that not much changed as a consequence of the action or event. For many actions, Status Quo is also the *most likely* outcome because of how infrequently such actions produce decisive change.

"Test" actions (including technology, missile, or nuclear tests) may succeed or fail. Likewise, attempts to upgrade National Tech Level or Critical Capability Mod Level may succeed or fail, and so forth.

For all of these situations, however, the action or event outcome is usually expressed in one or more of the following terms:

- > Changes in relative Influence among participants (measured in IPs)
- > Changes in National Tech Level or Critical Capability Mod Level
- > Imposition of additional cost on one or more participants
- ➤ Imposition of additional conditions on one or more participants (making it easier or harder to do something, depending on context).

In other words, outcomes of actions and events are typically in terms of factors that directly or indirectly affect players' progress toward their strategic objectives.

Adjudicating Player Action and Investment Cards

This section provides some representative examples of player Action and Investment Cards to familiarize players and facilitators with the different patterns of resolution procedures outlined earlier.

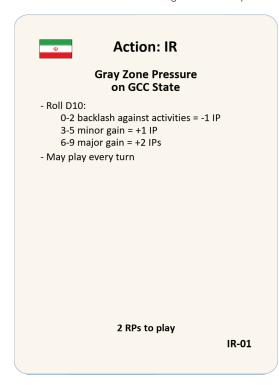
Gray Zone Actions

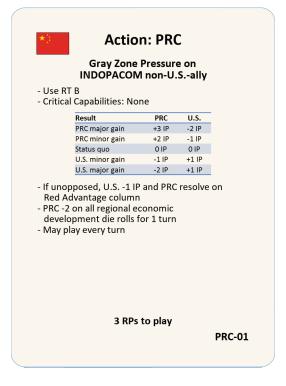
Both of the first two examples, shown in Figure 8.3, are gray zone actions, but because the IR player action does not allow for a Blue force response, the die-roll outcomes are specified directly on the card.

In this example, the IR player would be expected to elaborate on the specific state(s) and circumstances involved, including any details concerning the nature of the operations and IR's specific role in them that Blue would likely know, either through direct observation or intelligence. Playing this card costs the IR player two RPs, and, assuming the IR player has the resources, the card may be played every turn. Notice that the probability of success does not hinge on IR force capability or capacity, because this action does not involve uniformed military forces and formations. The IR player rolls a D10 and reads the action outcome directly from the card. The IR player's IPs are incremented or decremented appropriately, players briefly discuss what likely happened to cause that outcome, and play continues with the next action or event.

The PRC action, on the other hand, is an example of a "typical" two-step force interaction adjudication procedure. This action is expected to involve noncombat interactions between military forces, and Blue has the opportunity to respond to PRC's action. As in the IR action example, the PRC player would be expected to elaborate on the specific states, locations, forces, and operations involved and other relevant context that

Figure 8.3. Example of Gray Zone Action Adjudication





Blue would likely know from observation or intelligence. The card specifies that RT B should be used to determine the probability outcome, and Critical Capabilities do not factor in this case. The PRC player commits their forces, and, if Blue responds with forces of their own, probabilities are calculated on RT B, based on the ratio of forces, using procedures detailed in Chapter Twelve. The PRC player then rolls a D10, reads the probability outcome from RT B, and consults the table on the card for the action outcome. IPs of affected players are updated as appropriate, and, following a brief post-action discussion of what likely happened, play moves on.

If the U.S. player does not respond (which may be in alignment with the Blue strategy), then the PRC player rolls the die using the "Red Advantage" column on RT B (see Chapter Twelve for more information), and the "bookkeeping" and discussion play out as mentioned. Notice that this action has a mandatory negative consequence for the PRC player (a die-roll modifier of -2 on all of the PRC's economic development Action Cards, which significantly reduces the chance of success) for the turn following this outcome, regardless of PRCs success or failure in the operation. It costs the PRC player three RPs to play this card, and it may be played every turn.

Missile Tests

Both of the following two examples, shown in Figure 8.4, are missile tests, and the pattern for both the IR and DPRK cards is similar. Resolution is conditional on the results of the test. First, after describing the context of the action to the other players, the Red player rolls a D10 to determine whether the test was successful. If a previous test card has been played, the success or failure of *that* test modifies the die roll of this test by plus or minus 2. If the current test fails, the result is Status Quo and the resolution is complete (in these two cases, with no change in Influence for the initiator but a loss of RPs).

If the test succeeds, the initiator gains Influence, and other players now have the option of responding. For the IR test, the potential responder is the United States. For the DPRK test, the United States and the PRC may compete for intervention (each side rolls a D10, and the higher roll wins the right to intervene). In the default scenario, the Victory Conditions are written in such a way that both the PRC and the United States lose if the DPRK wins or loses, so, at some level, it is in the interest of both the United States and the PRC to have someone respond to deter the DPRK's progress. The actions outlined on these cards, which would be initiated by the owning player, provide opportunities for other players to respond or intervene. If a player chooses to respond, they must either allocate one or more of their FFs from forces already in the AOR or deploy or redeploy FFs from another AOR.

These two cards illustrate resolution procedures that depend, in part, on whether another player responds to the action taken by the IR or DPRK player. For the IR card, RT B is used first to determine the probability outcome, and that result is used to look up the action outcome on the card. For the DPRK card, the action outcome of the die roll is read directly from the card. For many DPRK Action Cards, the action outcome is *lead-dependent*—i.e., the outcome in IPs (and, for some cards, RPs) is different depending on whether the United States or the PRC is leading the intervention. Such cards with different outcomes have columns divided by a slash (/). If the United States leads, then the outcomes on the

left side of the slash are used. If the PRC leads, then the outcomes on the right side of the slash are used.

Finally, both cards have some additional conditions, including an IP penalty if no one responds to the test. Other IR and DPRK test actions follow these same patterns.

Arms Proliferation

The two cards shown in Figure 8.5 involve missile shipments, which show differences in the resolution procedures similar to those of the previous examples. The IR card uses RT B for the probability outcome, while the DPRK action shows the probabilities directly on the card. In both cases, other players have the option of responding (with the United States and the PRC competing again, the higher roll wins).

In the DPRK action, it is also typical to permit all of the responding player's FFs of the appropriate type (i.e., along the potential shipment route) to count in the die-roll modifier (e.g., FFs near the coast of Iran, in the Indian Ocean, on the Korean peninsula, and in the western Pacific in the Sea of

Japan or the East China Sea may all count as able to interdict the proliferation; the White Cell will determine this).

The reader may ask, "Why did you not use the two-step procedure with RT B on the DPRK card?" The answer is that we wanted access to different probability distributions from those on the baseline resolution table because we provide a larger variety of tests for the DPRK player in the default scenario.

Combat Actions

The two examples in Figure 8.6 show incursion actions that would likely involve combat operations, in which Critical Capabilities factor in the outcomes.

Whether either incursion results in combat is up to the initiating and responding players as they elaborate on the action to provide the context needed for everyone to understand what is happening. Nevertheless, the

Figure 8.4. Example of Missile Test Action Adjudication



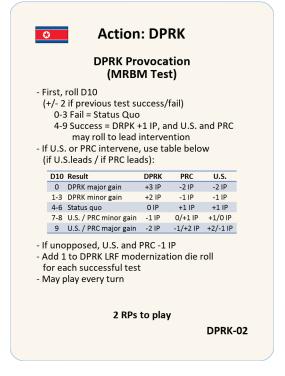


Figure 8.5. Example of Arms Proliferation Action Adjudication



Action: IR

Iran Provocation (Iran Ships Missiles to Hezbollah)

- If U.S. responds, use RT B

Result	Iran	U.S.
	IIaii	0.5.
Iran major gain	+4 IP	-4 IP
Iran minor gain	+2 IP	-2 IP
Status quo	0 IP	+1 IP
U.S. minor gain	-1 IP	+2 IP
U.S. major gain	-3 IP	+4 IP

- U.S. add 1 to die roll for every FF in the AOI
- If unopposed, U.S. -2 IPs and Iran resolve on Red Advantage column
- May play every two turns

3 RPs to play

IR-09



Action: DPRK

DPRK Provocation (DPRK Ships Missiles to Iran)

- U.S. and PRC may roll to lead interdiction
- If U.S. or PRC interdict, use table below (if U.S.leads / if PRC leads):

D10	Result	DPRK	PRC	U.S.
0	DPRK major gain	+2 IP	-2 IP	-2 IP
1-3	DPRK minor gain	+2 IP	-1 IP	-1 IP
4-6	Status quo	0 IP	+1 IP	+1 IP
7-8	U.S. / PRC minor gain	-1 IP	-1/+2 IP	+2/+1 IP
9	U.S. / PRC major gain	-3 IP	-2/+4 IP	+4/+1 IP

- Responders add 1 to die roll for each FF in the AOI
- If DPRK gain, IR adds one to its missile test die roles for next two turns
- If unopposed, U.S. and PRC -1 IP, and DPRK resolve on RT B, Red Advantage column
- May play every two turns

2 RPs to play

DPRK-06

Figure 8.6. Example of Combat Action Adjudication



Action: PRC

Incursion into **INDOPACOM Non-U.S.-Ally**

- Use CRT A
- Critical Capabilities: PRC: C4ISR or LRF

U.S.: C4ISR or IAMD

Result	PRC	U.S.
PRC major gain	+3 IP	-3 IP
PRC minor gain	+2 IP	-2 IP
Status quo	0 IP	0 IP
U.S. minor gain	-1 IP	+1 IP
U.S. major gain	-2 IP	+2 IP

- If unopposed, U.S. -2 IP and PRC resolve on RT B Red Advantage column
- Reset rules apply
 PRC -3 on all regional economic development die rolls for 2 turns
 May play every turn

4 RPs to play

PRC-03



Action: RU

Incursion into Non-NATO State

- Use CRT A
- Critical Capabilities:

RU: LRF or C4ISR U.S.: C4ISR

Result	RU	NATO/EU	U.S.
RU major gain	+3 IP	-3 IP	-3 IP
RU minor gain	+2 IP	-2 IP	-2 IP
Status quo	0 IP	0 IP	0 IP
U.S. minor gain	-1 IP	+1 IP	+1 IP
U.S. major gain	-2 IP	+2 IP	+2 IP

- If unopposed, U.S. and NATO/EU -2 IP and RU resolve on RT B Red Advantage column
- Reset rules apply
- May play every turn

6 RPs to play

RU-05

outcomes of these actions were assessed to depend, in part, on the differences in Critical Capability Mod Levels among participants.

If Blue does not respond to either action, IP penalties are specified and the Red player is directed to resolve the action with a die roll using RT B, on the "Red Advantage" column (see Chapter Twelve for more details). If Blue does respond, then the resolution procedure is similar for both actions.

First, players calculate the number of CFs that result from the FFs they have chosen to commit to the action, using procedures described in Chapter Ten. Both the number and the Mod Level of the FFs involved will affect the result. For the U.S. player, the Readiness Level of their forces will also affect the number of CFs generated (the impact of readiness and the procedures for managing it are detailed in Chapter Fourteen).

Next, players compare their highest applicable Critical Capability Mod Levels and subtract the Red level from the Blue level. This number is the die-roll modifier—a number added to the die roll before the probability outcome is looked up in CRT A. The resolution tables are constructed so that higher die rolls favor Blue and lower rolls favor Red.

Exercises, Cooperation, and Unconventional **Operations**

The next four examples, shown in Figures 8.7 and 8.8, are actions that do not involve interactions between traditional ground, air, or naval forces.

All four of these cards are examples of actions that do not specify a twostep resolution process through CRT A or RT B. Three of them also do not provide a provision for Blue to respond or interact at all. All of these cards show the entire resolution procedure on the card. Simply follow the instructions; make choices and/or roll the die as directed; take whatever actions correspond with the die roll, including tallying whatever changes in Influence and RPs are directed in the procedure; and then pay the cost to play in RPs (at the bottom of the card).

There is one other condition (on card RU-17, Joint Military Exercises with Partners) that will come up on some cards. This is the condition that the action is public. On other cards, the action (or event) may be private. Public actions or events are ones in which every detail on the card, including outcomes, is revealed to all players. This simulates "open" events whose details and outcomes are generally visible at least to the intelligence capabilities of all the players, if not to the public and the press. Private actions or events, on the other hand, may be wholly or partially obscured to everyone except the owning player and the White Cell. Cards that do not specify public or private are assumed to be public.

In general, Private actions and investments initiated by a player are shown to all players, but the outcome is resolved in secret by hiding the die roll from all but the affected player and the White Cell. Private events are normally handled and tracked by the White Cell, typically by notifying the affected player(s) by handing them the applicable card.

The reason for sometimes putting Public unconditionally on cards (when cards with no specification are assumed to be public) is because there are sometimes different "versions" of an action or event that have similar circumstances or conditions, but some are considered public and others private. Public is used on those cards to be clear it was not an "omission" by the scenario designers. Public and private actions, investments, and events are also described at the end of Chapter Seven.

Common Investment Options

The next two cards (Figure 8.9) are common in some form to all players. They involve the actions of upgrading National Tech Levels (i.e., national science, technology, research, and development capability and capacity), modernizing asymmetrical capabilities (Critical Capability Mod Levels), and modernizing and procuring forces.

Increasing National Tech Level is important because it places an upper bound on how modern a player's forces and Critical Capabilities may be. The attempt also costs resources, and the outcome is uncertain. The outcome probability is player-dependent (based on the scenario) and also depends on whether the player is "leading" in National Tech Level (i.e.,

Figure 8.7. Example of Cyber and Nonmilitary Action Adjudication





Figure 8.8. Example of Exercise and Proxy Action Adjudication



Action: RU

Joint Military Exercises with Partners

- Partner agrees and invests 1 RP
- Roll D10
 - 0 = Fail, RU -1 IP
 - 1-3 = Status quo
 - 4-6 = RU and partner(s) minor gain;
 - RU + 1 iP
 - 7-9 = RU and partner(s) major gain; RU and partner(s) +1 IP
- May play every turn

Public 1 RP to play

RU-17



Action: RU

Strengthen Proxies in the Region (Minor Action)

- Send modest support to proxies in up to three of the following areas:
 - Ukraine
 - Moldova
 - Belarus
 - Georgia
 - Syria
 - Afghanistan
 - Baltics
 - Libya
- Spend 1 RP per area (up to 3)
- Gain 1 IP for each RP spent
- May play every other turn

1-3 RPs to play

RU-18

Figure 8.9. Example 1 of Investment Adjudication



Investment: PRC

Invest in R&D to Increase National Tech Level by 1

- Roll D10
 - If PRC leads tech level (>= other players)
 - 0-5 = No change
 - 6-8 = Increase Tech level by 1 in two turns
 - 9 = Increase Tech level by 1 next turn
 - If PRC not leading tech level
 - (< other players)
 - 0-2 = No change
 - 3-9 = Increase Tech level next turn
- May play every turn

Public 4 RPs to play

PRC-26



Investment: PRC

Upgrade LRF targeting of maritime targets (C4ISR)

- Roll D10
 - 0-1 = No change
 - 2-8 = Increase C4ISR mod level by 1
 - 9 = Increase C4ISR mod level by 2
- If private, becomes public on first use, or after three turns (whichever comes first)
- May play every two turns

Roll D10: 0-2 = Private, 3-9 = Public 4 RPs to play

PRC-24

their level is higher than or equal to the highest level achieved in the game so far) or "following" (i.e., not leading). To resolve, pay the resource cost, roll the die, and follow the instructions. If successful, the result takes effect in the number of turns specified. The outcome of attempting to increase National Tech Level is always public under the default scenario.

Investment in upgrading Critical Capability Mod Levels, however, is different. The *attempt* is public (i.e., other players know it is being attempted), but the *outcome* may be public or private, depending on the conditions specified on the card. To resolve, the player pays the resource cost, then rolls a "hidden die" (i.e., shields the result from everyone except themselves and the White Cell) to first determine whether the outcome will be public or private. The player then rolls again for the outcome of the investment, and, if it is private, reveals the outcome only to the White Cell. The card will indicate the conditions under which the private outcome may be revealed later. In most cases, upgrading Critical Capabilities may be attempted only every other turn.

The next two cards illustrate how to resolve force modernization and procurement cards (see Figure 8.10). This action permits players to upgrade a scenario-dependent proportion of their total existing FFs, rounded up, to the next-highest Mod Level. The resulting Mod Level may not be higher than their National Tech Level. The procedures and costs involved are detailed in Chapter Thirteen of this rulebook and on the Modernization and Procurement Costs mat. Modernization is "pay to play" (i.e., it costs nothing to play the card—costs are determined on the Modernization and Procurement Costs table. The outcome is also certain. If a player has the resources, they can modernize up to the percentage of forces specified on the card, rounded up. Modernization takes place during the player's Investments and Actions Phase, and modernized forces are available for play immediately.

The other card is for procuring new forces (i.e., buying force structure). Players may procure any number of FFs at any Mod Level up to their National Tech Level. Like the procedures for force modernization, procurement is "pay to play" (whatever the player can afford) and the outcome is certain. Specific procedures are detailed in Chapter Thirteen and

on the Modernization and Procurement Costs mat. Although the procedures are the same for all players, Blue may procure forces during their Investments and Actions Phase, and the new forces are available for play immediately. Red players must wait until the end of their turns to procure new forces, and those new forces are not available for play until the beginning of their next turns.

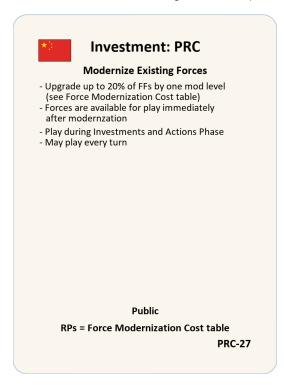
The last sample Investment Card (Figure 8.11) involves building a base outside the player's "home" AOR. Although this is covered in more detail in Chapter Nine, at this point, it is simply important to understand that it costs Red players some number of RPs to conduct out-of-area operations. Building a base in another AOR reduces the cost of such operations in that AOR for the remainder of the game. Note that it also costs the Red player resources to build the base. Under the default scenario, Blue may not intervene in response to the action of building a base but must instead deter or impose costs on Red operations in that AOR through other actions of their own.

Adjudicating Event Cards

As described in Chapter Seven, there are two types of Event Cards: International Events and Domestic Events. Although the Domestic Event Cards apply to specific players, both the International and Domestic Event Card decks are handled by the White Cell in the default scenario. The White Cell injects events at specific points of interest during a turn, usually to reshape how play is unfolding, adjust the pace of play, or rebalance play. Event Cards may also be injected at random, using die rolls.

The rest of this section presents representative examples from the Event Card decks to familiarize players and facilitators with the variety of resolution procedures they may encounter. In general, the Event Card decks present more variety than do the Action Card decks. Not only are Event Cards more verbose, because the cards are expected to provide more specific context, but they also may touch on a wider variety of political, economic, social, humanitarian, information, and infrastructure events that could either affect the use of military forces or encourage or demand a military response.

Figure 8.10. Example 2 of Investment Adjudication



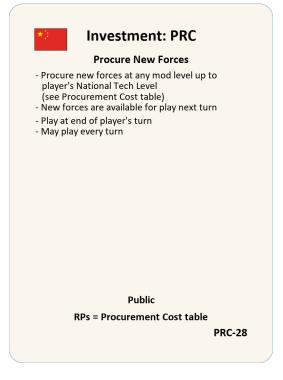


Figure 8.11. Example of Investment Adjudication



Investment: PRC

Build Permanent Base in another AOR

- Reduces cost to play Out of Area Operation card for that AOR by 1 RP
- May also enable selected Critical Capabilities
- May be played once every three turns
- Cannot play more than once per AOR

3 RPs to play

PRC-29

Domestic Event Card Adjudication Examples

What follows in Figures 8.12-8.17 are pairs of representative positiveand negative-outcome Domestic Event Cards from each player deck.

All of these cards share a pattern: Something happens, the outcome of which either rewards or penalizes the affected player in some combination of resources, influence, or freedom of action. The outcome may generate effects on the current turn, on subsequent turns, or both.

In many cases, the event may call for a private or public die roll. In contrast to player Action Cards, events with a private condition call for a roll before the event is revealed. In play, this is handled by the White Cell, who shows the card to the affected player and asks them to roll a die. If the outcome is private, the card is handed to the player, and rewards or penalties remain secret until the conditions for revealing them (specified on the card) are subsequently met during play. If the outcome is public, evervone is notified of the result.

Another common thread through all of these cards is that they leverage specific context about the affected country and region to shape the conditions and outcomes of the event.

In most cases, the outcomes ease or constrain one or more of the ways players may take action in the current turn or subsequent turns by adding or subtracting RPs or die-roll modifiers or by imposing or relieving the conditions for action. In a few cases, however, the events are tipping points that drastically alter a player's situation in the game and significantly alter game conditions-e.g., invasion of Taiwan or (shown in Figure 8.17) a coup in the DPRK.

Figure 8.12. Example of U.S. Domestic Event Adjudication



Domestic Event: U.S.

Advance in **Self-Driving Cars**

U.S. tech companies make significant progress in the development and deployment of selfdriving vehicles. Transitionable advances in AI used in these systems spillover into the defense sector.

- Cost of FF modernization reduced by 25% per mod level (rounded down, result no less than 1 RP)
- If private, remains private until results of the modernization private-public die roll to which it is applied

Roll D10: 0-2 = Private, 3-9 = Public EVT-US-01



Domestic Event: U.S.

Interceptor Test Series Fails (IAMD)

A series of unsuccessful tests cause SECDEF to direct program reviews of several key missile defense programs, which delay several planned upgrade milestones.

- Cannot upgrade IAMD next turn

Roll D10: 0-3 = Private, 4-9 = Public EVT-US-06 In general, players and facilitators should assume that there is at least one Event Card (and usually two; positive and negative) affecting each of the "standard" actions players may take to develop their forces (i.e., events affecting National Tech Level, every Critical Capability, force modernization, and force procurement), as well as the costs associated with various types of operations. The White Cell can use these events to "make up for bad die rolls" if chance has taken a game session "off track" (i.e., closed the door on desirable encounters or significantly reduced opportunities to achieve the desired learning objectives involving one or more players).

As we have said earlier, the primary purpose of Hedgemony is to accomplish the session learning objectives. Play is not intended to be "fair." Domestic Event Cards provide a way to keep the game "on track" in the context of the session scenario and the desired learning objectives. Therefore, a key consideration when deliberating what Domestic Events to play is how to maintain consistency and coherence with the backstory that has evolved in the course of play but still accomplish the objectives for the session. The White Cell must be mindful of the potentially adverse impact of injecting events that are unlikely to arise or that are incoherent with the world or domestic conditions that were defined in the scenario or that have emerged up to that point in the game.

EVT-RU-13

Figure 8.13. Example of Russia Domestic Event Adjudication

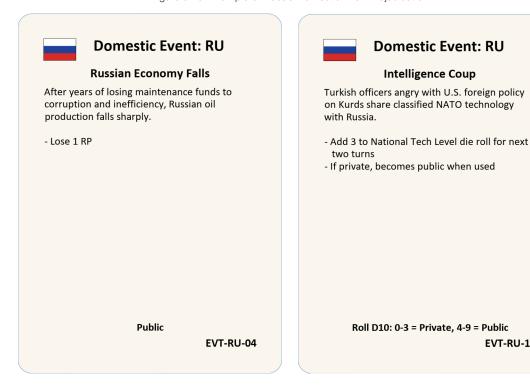


Figure 8.14. Example of China Domestic Event Adjudication



Domestic Event: PRC

Inadvertent Escalation in South China Sea

Posturing between coast guards in the South China Sea leads to the Chinese ramming a Vietnamese fishing vessel and killing fishermen. This was an inadvertent escalation that all parties work to de-escalate. While this sends a signal to Vietnam and Thailand about Chinese military power, Chinese soft power takes a hit.

- PRC loses 1 IP
- Subtract 3 from all PRC economic die roles through next turn

Public

EVT-PRC-13

Domestic Event: PRC

Successful **Party Congress**

China conducts a successful Party Congress to showcase their smooth transition in leadership and China's continued economic progress.

- Cost of Pressure or Incursion on U.S.-Ally decreased by 1 for two turns
- Cost of Pressure on Non-U.S.-Ally decreased by 1 for two turns
- Cost of Incursion into Non-U.S.-Ally decreased by 2 for two turns

Public

EVT-PRC-15

Figure 8.15. Example of NATO/EU Domestic Event Adjudication



Domestic Event: NATO/EU



Interoperability **Improves C4ISR**

NATO increases interoperability with U.S. systems and benefits from improved C4ISR as a result.

- Increase C4ISR mod level by 1
- Cannot be higher than U.S. mod level
- If private, becomes public on first use, or after three turns (whichever comes first)

Roll D10: 0-3 = Private, 4-9 = Public **EVT-NATO-05**



Domestic Event: NATO/EU



Unable to Reach Policy Consensus

Turkey opposes U.S. support to Kurdish fighters in Syria, causing friction within NATO. NATO is unable to reach policy consensus as a result.

- NATO cannot reposition FFs in its next action phase, but may deploy forces in response to other players' actions

Public

EVT-NATO-11



Domestic Event: IR

Support to Hezbollah

Anti-Israeli sentiment in Iran drives additional government support to Hezbollah in Lebanon. Iran gains additional influence as a result, but must expend additional resources.

- Iran -1 RP and +1 IP next turn

Roll D10: 0-3 = Private, 4-9 = Public EVT-IR-04



Domestic Event: IR

Terror Comes to Tehran

Terrorists launch multiple attacks in Tehran, killing dozens of people. Although the culprit might be ISIS, the Revolutionary Guard suspects Saudi Arabia and the United States. The attacks also spook potential investors.

- For one turn:
 - If Iran believes ISIS was involved, +2 IPs for using forces in Iraq or Syria
 - If Iran believes Saudi Arabia or the United States were involved, +2s IP for using forces in a conflict with Saudi or U.S. forces
 - Minus 2 on any infrastructure investment cards

Public

EVT-IR-10

Figure 8.17. Example of DPRK Domestic Event Adjudication



Domestic Event: DPRK

China Tech Assist

China is concerned that Japan's military modernization efforts are eroding China's military advantages.

Using the Japanese Prime Minister's visit to the Yasukuni Shrine as a pretext, China provides missile technology assistance to the DPRK.

They hope the increased threat of DPRK missile capabilities will distort the Japanese military's investment profile.

- Add 1 to missile test die roll next test

Public

EVT-DPRK-04



Domestic Event: DPRK

Kim Dies: Coup

- U.S. & PRC may roll to respond
- Responder then rolls on the following table (if U.S.leads / if PRC leads):

D10	Result	DPRK	PRC	U.S.
0	Loose nukes	-	-6 IP	-6 IP
1-3	Refugee crisis	-	-4 IP	-2 IP
4-6	Status quo	-	+2 IP	+2 IP
7-8	U.S. / PRC minor gain	-	-1/+1 IP	+1/-1 IP
9	U.S. / PRC major gain	-	-2/+3 IP	+3/-2 IP

- Responder must deploy at least 2 FFs to Korea, which are pinned for next 4 turns
- If neither responds, DPRK rolls die and PRC and U.S. both get most unfavorable result (losses for both on rolls of 7-9)

Public

EVT-DPRK-06

International Event Card Examples

The variety of International Event Cards is even more diverse than that of the Domestic Event Cards, and International Events usually affect more than one player. While Domestic Events are used mainly to adjust the relative pace or balance of play among players, International Events are used primarily to induce specific types of interactions between two or more players. This section provides a representative sample. The kinds of challenges International Events typically pose to players include the following:

- Introducing crises in an underemphasized or avoided AOR
- Compelling or escalating interactions between two or more players whose relationships so far may have been "too quiet"
- Forcing hard trade-space decisions for players who have not been stressed sufficiently up to this point in the game.

In the example event shown in Figure 8.18, the United States, NATO/EU, and the PRC may all participate in the peacekeeping force, take the risks, and be rewarded if successful.

Figure 8.18. Example of International Event Adjudication: Optional Player Response



Conflict Event

South Sudanese Genocide

AOR: AFRICOM

DESCRIPTION: Fighting between the Dinka and the Nuer in the South Sudanese civil war escalates into full scale genocide. The UN fears a repeat of Rwanda in 1994 but has lost credibility after UN peacekeepers fail to protect civilians. The UN Secretary General calls for additional peacekeeping forces to stop the genocide.

PLAYERS INVOLVED: U.S., NATO/EU, China

PLAYER ACTIONS AND RESOLUTION:

- U.S., NATO/EU, and China may each send FFs to South Sudan
- Roll D10:
 - 0-7 = killing continues, U.S. and NATO/EU -1 IP each and the card is rerolled next turn
 - 8-9 = killing stops, +2 IPs for all players who sent peacekeeping forces
- Each U.S., NATO/EU, or Chinese FF sent to South Sudan adds +2 to the die roll
- This card is rerolled only once, and the genocide ends automatically after two turns

Public

EVT-CON-02

Despite their variety, International Event Cards make use of the same resolution tools and procedures found on the player Action, Investment, and Domestic Event Cards:

- ➤ Various context and conditions are specified.
- Players may have the option, or may be directed, to respond.
- The response may involve costs and/or present opportunities and
- The event may involve combat and Critical Capabilities.
- > Use of two-step resolution (CRT A or RT B) may be directed, or the event outcomes may be specified directly on the card.
- There may be penalties and/or rewards in RPs and/or IPs.
- There may be consequences and conditions affecting subsequent

In the example shown in Figure 8.19, existing Nigerian and Boko Haram (BH) forces are stipulated in the conditions, and a U.S. response would augment the Nigerian forces in capacity and capability (through the U.S. SOF Critical Capability Mod Level). This is an example of "scripting" additional non-player forces into the game through an event-gray forces counters are provided if it becomes necessary to represent them on the game board depending on the outcome of the event. Scripted forces con-

Figure 8.19. Example of International Event Adjudication: Scripted Forces



Conflict Event

Boko Haram

AOR: AFRICOM

DESCRIPTION: Human rights abuses by paramilitary forces and numerous high-profile corruption cases against the Nigerian political class fuel resurgence of Boko Haram. BH occupies Kano and advances on other major cities.

PLAYERS INVOLVED: U.S.

PLAYER ACTIONS/OPTIONS (see table below):

- If U.S. intervenes, it deploys up to 2 FF (minimum readiness 80%), and can add 1 CF to Nigeria with investment of 1 RP
- If U.S. does not intervene, -2 IPs

Resolution Table	Use CRT A
Additional CFs	Nigeria: 1 + any additional combat factors, Boko Haram: 2 CFs
Critical Capabilities	SOF
Any Blue gain	U.S. +2 IP and U.S. forces are pinned until the end of the turn
Stalemate	No U.S. IPs. U.S. rolls each turn until one side wins
Any Red gain	U.S2 IP and U.S. forces are unpinned at the end of the turn

Public

EVT-CON-04

tribute to force ratios and the calculation of CFs as part of event resolution in the same ways as other players' forces.

Every AOR is represented with multiple International Events. The context for these cards has typically been drawn (or extrapolated) from history or from open source assessments and projections of potential futures. There may also be events with global scope (affecting all players).

In the example shown in Figure 8.20, the unilateral action of a U.S. ally poses a challenge for the U.S. strategy. The U.S. player would be expected to act in alignment with their strategy—this is one of several cards in the International Event deck that test that.

Figure 8.20. Example of International Event Adjudication: Unilateral Action of a U.S. Ally

The card shown in Figure 8.21 is another example that tests the U.S. player's strategy. It is a conflict initiated by a U.S. ally or partner involving combat action in which a U.S. response would augment a partner force with both capacity (FFs) and capability (the SOF Critical Capability Mod Level).

Figure 8.21. Example of International Event Adjudication: Assisting U.S. Allies

Conflict Event

Operation Opera II

AOR: CENTCOM

DESCRIPTION: Israel receives intelligence that Iran is bypassing treaty obligations and continuing to develop nuclear capabilities. The Prime Minister informs the U.S. that the IDF intends to conduct aerial strikes against suspected Iranian nuclear R&D sites. If the U.S. actively supports the Israeli strike, it gains more from a successful mission, but risks a drop in influence from a failure.

PLAYERS INVOLVED: U.S., Iran

PLAYER ACTIONS/OPTIONS (see table below):

- U.S. declares whether it will actively support the Israeli strikes with missile/bomb strikes of its own
- U.S. rolls D10 to see results of Israeli attack

U.S. Active					U.S. Passive			
D10	Result	U.S. IP	Iran IP	D10	Result	U.S. IP	Iran IP	
0-4:	Decisive success	3	-3	0:	Decisive success	2	-2	
5-6:	Moderate success	2	-2	1-3:	Moderate success	1	-1	
7-8:	Limited success	-1	1	4-5:	Limited success	0	1	
9:	Mission unsuccessful	-4	4	6-9:	Mission unsuccessful	-2	3	

Public

EVT-CON-10



Conflict Event

Aden of Vipers

AOR: CENTCOM

DESCRIPTION: The Yemeni Civil War continues unabated, with Iran and Saudi Arabia supporting opposing sides. U.S. allies in the Arabian Peninsula call for an increased U.S. presence to prevent a Houthi victory.

PLAYERS INVOLVED: U.S., Iran

PLAYER ACTIONS AND RESOLUTION (see table below):

- The U.S. player may deploy up to 2 FFs (at least 80% readiness) to Arabian Peninsula (AP)
- Iran may respond by moving up to 2 FFs into Yemen
- U.S. -2 IPs if it does not deploy forces to AP

Resolution Table	Use CRT A				
Additional CFs	Blue Allies: 2 CFs, Houthis: 1 CF				
Critical Capabilities	SOF				
Results	U.S.	Iran			
Red major gain	-2 IP	+2			
Red minor gain	-1 IP	+1 IP			
Status quo	No effect	No effect			
Blue minor gain	+1 IP	-1 IP			
Blue major gain	+2 IP	-2 IP			

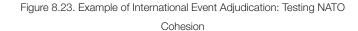
Public

EVT-CON-14

Some cards challenge the U.S. player with out-of-area actions from a strategic competitor. In the example shown in Figure 8.22, the PRC imposes a cost on U.S. operations in CENTCOM, compelling the U.S. player to reconsider their posture in both CENTCOM and INDOPACOM.

Both International and Domestic Event Cards are used to challenge NATO cohesion. In the example shown in Figure 8.23, a NATO ally begins to realign toward a strategic competitor, forcing choices for both the U.S. and NATO/EU players.

Figure 8.22. Example of International Event Adjudication: Red Out-of-Area Actions





Conflict Event

India-Pakistani **Tensions**

AOR: CENTCOM, INDOPACOM

DESCRIPTION: A dramatic terrorist attack on the Indian Parliament captures global headlines. The attack is traced back to a Pakistani militant group with links to the Directorate of Inter-Service Intelligence (ISI). There is continuing combat involving Pakistani ISIsupported groups and Indian military and paramilitary forces in Jammu and Kashmir. This complicates U.S. counter-terrorism (CT) operations in Afghanistan. China has an opportunity to support Pakistan.

PLAYERS INVOLVED: U.S., China

PLAYER ACTIONS AND RESOLUTION:

- Readiness cost of U.S. forces in Afghanistan increased by 1 RP per FF for two turns
- If China spends 1 RP to send support to Pakistan, China +1 IP, U.S. -1 IP

Public

EVT-CON-16



Political Event

Ankara Turns North

AOR: EUCOM

DESCRIPTION: Turkey's crackdown on internal dissent prompts numerous objections from EU governments and fierce criticism in the European press. Turkey responds by improving relations with Russia.

PLAYERS INVOLVED: NATO, U.S., Russia

PLAYER ACTIONS AND EFFECTS:

- U.S. -1 IP, NATO -1 IP, Russia +1 IP
- U.S. and NATO pay 1 additional RP to deploy FFs to Iraq, Lebanon, Syria or the Caucasus for the next two turns

Public

EVT-POL-19

International Event Cards may involve both direct costs in RPs and indirect costs associated with deployment of forces. Figure 8.24 is an event that tests the cohesion of both the NATO allies and the EU but also imposes a cost on the U.S. player, who may be forced to make hard choices about supporting NATO in this context if U.S. forces and resources are stretched thin responding to conflicts elsewhere.

Figure 8.25 is a sample International Event Card with global scope that rewards some players and punishes others (in RPs)—in this case, over changes in the price of oil.

Figure 8.24. Example of International Event Adjudication: Testing NATO-EU Cohesion

Figure 8.25. Example of International Event Adjudication: Rising Energy Prices



Political Event

Greece Appeals to Europe

AOR: EUCOM

DESCRIPTION: Greece struggles to effectively manage its refugee challenges in spite of generous EU support. The Greek government asks for additional EU resources and assistance from NATO/EU to shoulder some of the burden of intercepting refugees at sea and help establishing a coherent management and security structure for its camps. Greece also requests assistance from the U.S.and Russia.

PLAYERS INVOLVED: U.S., NATO/EU, Russia

PLAYER ACTIONS AND EFFECTS:

- U.S. and NATO/EU may contribute 1 RP for 1 IP, and may also commit 1 FF for an additional IP (each)
- If neither the U.S. nor NATO/EU responds, Russia may respond with the same cost-reward
- In addition, both U.S. and NATO/EU -1 IP for each Russian RP/FF commitment

Public

EVT-POL-21



Economic Event

Empty Tanks

AOR: Global

DESCRIPTION: A series of inexplicable and highly damaging accidents cripple petroleum infrastructure in Gulf Cooperation Council (GCC) states. The suspicion these events were the result of deliberate sabotage coupled with the subsequent dip in GCC oil production raises oil prices on the global market.

PLAYERS INVOLVED: All

PLAYER ACTIONS/OPTIONS: None

RESOLUTION:

- Petroleum-reliant exporters (Iran, Russia) get a one-time windfall of 2 RPs
- Petroleum importers (China, NATO/EU, DPRK) immediately pay 2 RPs this turn to sustain oil supply
- DoD pays 1 additional RP per deployment from CONUS or between AORs for two turns in higher transportation and training costs

Public

EVT-ECON-23

Figure 8.26 is a sample International Event Card that compels interactions between Red players and that does not involve Blue players at all.

Some International Events alter the status of a Red player in their region in ways that challenge U.S. alliances and access. The example shown in Figure 8.27 increases PRC's Influence in INDOPACOM and imposes operating costs on the U.S. player.

Other examples also may impose access costs (for example, when a U.S. partner or ally realigns to a strategic competitor).

Figure 8.26. Example of International Event Adjudication: Rising Energy Prices



AOR: INDOPACOM

DESCRIPTION: A succession of bombings near Silk Road Economic Belt (SREB) development sites in Kyrgyzstan and Tajikistan prompts security concerns in the region. Both China and Russia see the need for additional security.

PLAYERS INVOLVED: China, Russia

PLAYER ACTIONS AND RESOLUTION

- China and Russia may compete for leadership of security efforts near the SREB sites (high die roll)
- The winner may contribute 1 RP for +1 IP, and may also move 1 FF to the region for an additional IP, unless countered by a response of 1 FF by the loser
- If both China and Russia commit forces, resolve as follows (D10):
 - 0-2 = Russia +1 IP
 - 3-6 = Status quo
 - 7-9 = China +1 IP
- Forces remain pinned and event continues for up to three turns or until resolved (whichever comes first)

Public

EVT-CON-24

Figure 8.27. Example of International Event Adjudication: Challenging U.S. Alliances and Access



Conflict Event

Pirates of the South China Sea

AOR: INDOPACOM

DESCRIPTION: Piracy in the South China Sea (SCS) offers China the opportunity to step in with maritime security assitance to Malaysia, Singapore, and Indonesia, thereby gaining influence in the region.

PLAYERS INVOLVED: China

PLAYER ACTIONS AND RESOLUTION

- China may deploy 2 additional FFs into the SCS for +1 IP; forces must remain there for two turns
- U.S. -1 IP if China sends more forces to SCS
- China may also develop maritime security partnerships with these nations (-1 RP each attempt, use proxy reliability procedures); +1 IP for each successful partnership, and China must keep at least 1 FF deployed in the vicinity of at least one partner nation for the remainder of the game
- U.S. add 1 RP to the cost of each action (proactive or reactive) in the SCS for the remainder of the game if China succeeds in gaining maritime security cooperation with Singapore

Public

EVT-CON-29

The U.S. Southern Command (SOUTHCOM) and AFRICOM International Event Cards are intended to stress underrepresented AORs. The event shown in Figure 8.28 is a combat event, like some previous examples of player Action Cards, that invites the U.S. player to provide capacity and capability support to a South American ally—in this case, the Colombian government against a Revolutionary Armed Forces of Columbia (FARC) reemergence.

Gray forces counters provided with the game can be placed on the game board to represent the third-party forces called for in these types of Event Cards. Unless specified on the card, the White Cell will determine the mod level of third-party forces on a case-by-case basis consistent with the session scenario.

Although International Event Cards often involve or impose costs for the Blue players, they also may provide opportunities (and risks) to Red players. Figure 8.29 is an example. Notice that this example also adds conditions that affect the conditions and/or outcomes of another International Event Card, if and when it is played.

The bottom line for International Events in the default scenario is that most involve the U.S. player in some way, because the primary design objectives of the game were aimed at accomplishing U.S. player learning objectives. The White Cell should be mindful that the pace at which International Event Cards are injected into the game can have profound effects on how severely U.S. military capabilities and capacity are stressed from turn to turn, as well as how much it will cost the U.S. player (in deployment and readiness costs) to execute their strategy while also continuing to advance their longer-term force development objectives (through force modernization and technology development and/or procurement).

Figure 8.28. Example of International Event Adjudication: Crises in Quiet Areas of Responsibility



Conflict Event

Compound FARCtions

AOR: SOUTHCOM

DESCRIPTION: Colombian peace accords do not lead to expected dividends in social programs and political stability. A new radical movement, commonly called the FARC 2, seizes large rural areas and is mounting an offensive against regional authorities. The Colombian government asks for U.S. internal security assistance.

PLAYERS INVOLVED: U.S.

PLAYER ACTIONS/RESOLUTION (see table below):

- U.S. may decline intervention, resulting in -2 IPs in addition to any result from the table below
- U.S. may deploy up to a total of 2 FF (min readiness 80%) to Colombia, with forces pinned until a non-status-quo result
- U.S. may add up to a total of 2 combat factors to Colombian forces with investment of 1 RP per combat factor
- U.S. deployments and/or investments may span multiple turns

Resolution Table	Use CRT A
Additional CFs	Colombia: 1 CF, FARC2: 2 CFs
Critical Capabilities	SOF, C4ISR
Any Blue gain	FARC 2 is defeated: U.S. +1 IP
Status Quo	No U.S. IPs; U.S. rolls each turn until one side wins; IPs continue being lost each year of status quo
Any Red gain	FARC 2 overthrows Colombian government: -1 U.S. IP

Public

EVT-CON-35

Figure 8.29. Example of International Event Adjudication: Opportunities and Risks



Political Event

Chavez is Dead, Long Live Chavismo

AOR: SOUTHCOM

DESCRIPTION: U.S. foreign policy contributes to a backlash in Venezuela and energizes factions nostalgic for Chavez's policies. Responding to stepped-up anti-U.S. rhetoric, party leaders approach China and Russia for greater economic and military aid.

PLAYERS INVOLVED: U.S., China, Russia

PLAYER ACTIONS/OPTIONS:

- China and Russia use vote cards to indicate whether they will increase economic and military aid to Venezuela; cost of aid is 2 RP
- If both China and Russia offer aid, they get 1 IP each; if only one does, they get 2 IPs; if neither offers aid, Venezuela is politically isolated and the U.S. gets 2 IPs
- Empty Tanks event card has no negative effect on a Venezuelan patron-state

Public

EVT-POL-38

Multi-Turn Outcomes and Outcome Sequencing

Many cards in Hedgemony specify outcomes that span more than one turn (e.g., "May not upgrade LRF for two turns"). It is also possible that the outcome of a card played later in a turn may refer to an outcome that may have already occurred earlier in a turn. Use the following procedures to determine what outcomes apply, when, and for how long.

For multi-turn action and event outcomes, unless explicitly stated otherwise on the card, the first turn is the remainder of the current turn, the second turn is the following turn, and so on.

For actions or events whose outcomes refer to an action or event that has already occurred earlier in the turn, the latter outcome affects only actions or events that may occur later on that turn; outcomes that have already occurred, before the latter card was played, stand.

For example, say a player has already upgraded their C4ISR earlier in a turn, but a Domestic Event card is played by the White Cell (or is drawn at random) later in that turn whose outcome specifies that the player may not upgrade their C4ISR for two turns. In this case, the event has no effect on the player. Because the upgrade restriction starts on the current turn and lasts for the remainder of the turn and the following turn, and because players may upgrade their C4ISR only every two turns under the default scenario, the upgrade restriction has no effect.

The White Cell should be mindful of these considerations when planning to inject Domestic and International Events into the game, because the event outcomes can affect only actions or events that have not yet occurred on the current turn or that occur in later turns.

9. Deploying Forces

Deployment of forces involves moving forces from one place to another on the game board and generally costs some number of RPs if FFs are moved from one AOR to another. It costs nothing for any player to deploy or redeploy (reposition) forces within an AOR or their own country.

Figure 9.1 shows the mat that describes the procedures for calculating the costs of deploying forces. Notice that the procedures differ slightly between the United States and other players. It costs players one RP for each redeployment of forces from one location in an AOR that is outside the contiguous United States (OCONUS) to another OCONUS loca-

tion, regardless of the number of FFs involved in the move or the number of AORs traversed in the move, except when cost conditions are specified on the card in play. For Red players, deployment costs also are included in the costs of playing out-of-area operation Action Cards.

The determining factor in deciding whether a deployment or redeployment counts as one or more than one movement is the number of different originating locations and destination AORs, or the number of different actions to which these deployments are a response.

Figure 9.1. Calculating Deployment Costs

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

DEPLOYMENT COSTS

The tables below apply only to U.S. force deployments sourced from CONUS.

U.S. CONUS-SOURCED PROACTIVE DEPLOYMENT COST U.S. CONUS-SOURCED REACTIVE DEPLOYMENT COST

Force Factors	Cost (RPs)	Force Factors	Cost (RPs)
1	1	1	2
2	1	2	2
3	2	3	3
4	2	4	3
5	3	5	5
6	3	6	5
7	4	7	6
8	4	8	6
9	5	9	8
10	5	10	8
11	6	11	9
12	6	12	9
13	7	13	11
14	7	14	11
15	8	15	12

IT COSTS NOTHING FOR ANY PLAYER to deploy or redeploy (reposition) forces within an area of responsibility (AOR).

IT COSTS ALL PLAYERS 1 Resource Point (RP) for each redeployment of forces from one location in an OCONUS AOR to another OCONUS AOR, regardless of the number of Force Factors (FFs) involved in the move, except when specific cost conditions are stipulated on the card in play. The determining factor in deciding whether a deployment or redeployment counts for one or more than one movement is the number of different originating locations and destination AORs, or the number of different actions to which these deployments are a response. For example:

- The cost of redeploying 2 colocated FFs in EUCOM to CENTCOM is 1 RP.
- The cost of redeploying 2 FFs starting from two different locations within EUCOM to CENTCOM is 2 RPs—the White Cell will determine what is colocated.
- The cost of redeploying 2 colocated FFs in EUCOM to two different AORs is 2 RPs.
- The U.S. player uses the tables at left to determine the cost of deploying forces from CONUS to another AOR.

Redeployment of forces back to their "home" AOR (assume they are based in the AOR they started in at game start, including CONUS) is always free for all players, unless stipulated otherwise on the card in play or by the White Cell.

U.S. CONUS-SOURCED DEPLOYMENT COST PROCEDURE

- If the deployment from CONUS is during the U.S. player's Investments and Actions Phase, use the Proactive table at far left.
- If the deployment from CONUS is in reaction to an event or to a Red player action card and the deployment cost is not specified on the card, use the Reactive table at near left.
- The determining factor for how many separate moves these deployments constitute is the number
 of destination AORs (for U.S. Investments and Actions Phase deployments, treat each destination
 AOR as a separate deployment) or the number of different events/actions U.S. forces are responding
 to (each event/action response is a separate deployment).
- · Look up the number of FFs being deployed in the left-hand column.
- The RP cost of the deployment is the number in the Cost (RPs) column of that row.

For example,

- ➤ The cost of redeploying two collocated FFs from U.S. European Command (EUCOM) to CENTCOM is one RP.
- ➤ The cost of redeploying two FFs starting from two different locations within EUCOM to CENTCOM is two RPs—the White Cell will determine what is collocated.
- ➤ The cost of redeploying two collocated FFs in EUCOM to two different AORs is two RPs.
- ➤ The U.S. player uses the tables shown in Figure 9.2 (also shown on the Deployment Costs calculations and procedures mat) to determine the cost of deploying forces from CONUS to another AOR.

Red players who intend to execute more than one movement, as determined by the above rules, must execute and pay the costs of an outof-area operation for each such movement.

Redeployment of forces back to their home AOR is always free for all players, unless otherwise specified on the card in play or by the White Cell. Assume that non-U.S. forces are based in the AOR in which they started the game. Assume U.S. forces starting in CONUS are based in CONUS. The home base of all U.S. OCONUS forces at the start of the game will be determined by the session scenario (e.g., depending on the scenario, U.S. forces that start the game in EUCOM could be considered to be either based in EUCOM or deployed to EUCOM from CONUS).

For non-U.S. forces, the cost of operating outside their home AOR is essentially free unless otherwise specified on the card in play. For U.S. forces, the CONUS and OCONUS operating costs are determined on the Readiness tables in Chapter Fourteen, but they also may be specified or modified by the card in play.

The costs for deploying U.S. forces from CONUS to other AORs are determined by the tables and procedures in the following section.

Deployment Cost Calculation Procedure for U.S. Forces Sourced from the Contiguous United States

U.S. players must calculate deployment costs from CONUS using the tables on the Deployment Costs mat (shown in Figure 9.2). Deployment during the U.S. players' Investments and Actions Phase is typically significantly less costly than deployment executed later, in *reaction* to an event or the actions of another player.

If the deployment from CONUS takes place during the U.S. player's Investments and Actions Phase, use the Proactive (left-hand) table on the Deployment Costs mat. If the deployment from CONUS occurs in reaction to an event or to a Red player's Action Card, and the cost is not specified on the card, use the Reactive (right-hand) table on the Deployment Costs mat. The determining factor for how many separate moves these deployments constitute depends on whether the deployment is proactive or reactive. For **proactive** deployments (those that take place on a player's own initiative), each destination AOR is a separate deployment. For **reactive** deployments (those that take place in reaction to another player's actions), each separate event or action that U.S. forces are responding to is a separate deployment. Look up the number of FFs being deployed in the left-hand column of the Reactive table. The RP cost of the deployment is the number in the "Cost" column of that row.

Out-of-Area Operations and Bases

Under the default scenario, the RU and PRC players may conduct outof-area operations in certain AORs using Action Cards—one card for each applicable AOR. These cards (like the more specifically defined gray zone, incursion, and invasion Action Cards for events in their home regions) provide options for Red players to employ military forces in combat and noncombat actions in other countries or AORs. Out-of-area operations cost RPs, just like most other Action Cards.

The RU and PRC players also have the option of investing RPs to build a base in another AOR, which reduces the cost of all out-of-area operations in that AOR by one RP for the remainder of the game.

The U.S. player does not have out-of-area operations or base construction cards because OCONUS deployments and existing bases are part of the default scenario. Nevertheless, there are U.S. base counters in the game set, and U.S. players may attempt to build a base as part of their Action Phase. The U.S. player should describe the circumstances and their intentions to the White Cell, who will accommodate by defining the conditions and costs of the subsequent action(s) on a case-by-case basis. The RP costs of building a base should be somewhat greater than the costs to Red players, and the payoff could be handled as a reduction of some proportion of OCONUS readiness costs for the affected AOR. Uncertainty also could be injected into the action by using the rules described in the "Proxy Reliability" section of Chapter Fifteen.

Figure 9.2. Calculating Deployment Costs for CONUS-Sourced U.S. Forces

U.S. CO SOURCE PROAC DEPLOY COST	ED ΓΙVΕ	U.S. CO SOURC REACT DEPLO COST	ED
Force Factors	Cost (RPs)	Force Factors	Cost (RPs)
1	1	1	2
2	1	2	2
3	2	3	3
4	2	4	3
5	3	5	5
6	3	6	5
7	4	7	6
8	4	8	6
9	5	9	8
10	5	10	8
11	6	11	9
12	6	12	9
13	7	13	11
14	7	14	11
15	8	15	12

10. Calculating Combat Factors from Force Factors

As described earlier in Chapter Eight, there are two types of interactions between forces in Hedgemony: combat and noncombat. Noncombat interactions are likely to be more frequent than combat interactions and can include a variety of day-to-day military operations, from presence, posturing, and exercises to gray zone operations. Noncombat interactions are typically resolved, unless otherwise specified on the card in play, by comparing the ratio of opposing FFs and then consulting RT B (covered in Chapter Twelve).

Combat interactions, on the other hand, typically involve comparing the ratio of opposing CFs, using the procedure shown in Figure 10.1 (the Combat Factors from Force Factors calculations and procedures mat) and then consulting CRT A, covered in Chapter Eleven. Figures 10.2 and 10.3 show the tables from the Combat Factors from Force Factors mat.

Figure 10.1. Calculating Combat Factors from Force Factors

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

COMBAT FACTORS FROM FORCE FACTORS

IN-THEATER COMBAT FACTORS

Mod Level-to-Combat Factor Calculation for Force Factors Already in Theater or Flowed from Adjacent Theaters

Force	Resulting Combat Factors Based on Modernization Level							
Factors	1	2	3	4	5	6	7	
1	1	2	3	4	5	6	7	
2	2	4	5	7	8	9	10	
3	3	5	7	9	11	12	14	
4	4	7	9	12	14	16	18	
5	5	8	11	14	17	19	22	
6	6	10	13	17	20	23	26	
7	7	11	15	19	23	26	30	
8	8	13	17	22	26	30	34	
9	9	14	19	24	29	33	38	
10	10	16	21	27	32	37	42	
11	11	17	23	29	35	40	46	
12	12	19	25	32	38	44	50	
13	13	20	27	34	41	47	54	
14	14	22	29	37	44	51	58	
15	15	23	31	39	47	54	62	

READINESS IMPACT ON COMBAT FACTORS

Baseline Combat Factors	Resulting Combat Factors Based on Readiness Level							
	90%	80%	70%	60%	50%			
1	1	1	0	0	0			
2	1	1	1	1	0			
3	2	2	1	1	1			
4	3	3	2	1	1			
5	4	3	2	2	1			
6	5	4	3	2	1			
7	6	5	4	3	2			
8	7	5	4	3	2			
9	8	6	5	4	3			
10	9	7	5	4	3			
15	13	10	8	6	4			
20	18	14	11	8	6			
25	22	17	13	10	7			
30	26	20	16	12	9			
35	30	23	18	14	10			
40	35	27	21	16	12			
45	39	30	23	18	13			
50	43	33	26	20	15			

CONUS-SOURCED REACTIVE COMBAT FACTORS

Mod Level-to-Combat Factor Calculation for Reactive Force Factors Deployed from CONUS

Force	Modernization Level							
Factors	1	2	3	4	5	6	7	
1	0	1	2	3	4	5	6	
2	1	2	3	4	5	6	7	
3	2	3	5	6	8	9	11	
4	3	5	6	9	11	12	14	
5	3	6	8	10	13	15	17	
6	4	7	9	12	16	18	20	
7	5	8	11	14	18	20	24	
8	6	9	12	16	20	24	27	
9	6	10	14	18	23	26	30	
10	7	12	15	20	25	29	33	
11	8	12	17	21	28	32	36	
12	9	14	18	24	30	35	40	
13	9	15	20	25	32	37	43	
14	10	16	21	27	35	40	46	
15	11	17	23	29	37	43	49	

NOTES: The table above is also used to calculate the CFs for U.S. FFs whose Readiness has been "bought back" to a higher level on the same turn they are employed in an action involving CRT A.

USE THE TABLES AT LEFT to determine the Combat Factors (CFs) that result from a given number of Force Factors (FFs) at a given Modernization Level (usually for resolution on Combat Resolution Table A [CRT A]).

If the forces are of different Readiness Levels, calculate the CFs for each Readiness Level separately.

NON-U.S. PLAYER PROCEDURE

- Subtotal the FFs involved in the action by Modernization Level.
- Further subtotal these by source (originating within theater or an adjacent theater).
- For each subtotal originating in theater, look up the resulting CFs using the In-Theater table.
- For each subtotal flowing from adjacent theaters, calculate the CFs using the In-Theater table, but divide the result in half (rounding up).
- Sum all of the resulting CFs.

U.S. PLAYER PROCEDURE

- Subtotal the FFs involved in the action for all unique combinations of the following:
 - » Source (in theater, adjacent theater, or CONUS)
 - » Readiness Level
 - » Modernization Level.
- For each subtotal, look up the resulting CFs using the appropriate table.
 - » For each subtotal flowing from adjacent theaters, calculate the CFs using the In-Theater table, but divide the result in half (rounding up).
- For each group of CFs derived from FFs with less than 100% Readiness, use the table at left to look up the resulting CFs.
- · Sum all of the resulting CFs.

For each group of U.S. CFs derived from FFs with less than 100% Readiness, using the tables above, look up the CFs that correspond to the appropriate Readiness Level in the table at left.

CONUS-SOURCED REACTIVE IN-THEATER COMBAT FACTORS COMBAT FACTORS Mod Level-to-Combat Factor Calculation for Mod Level-to-Combat Factor Calculation Force Factors Already in Theater or Flowed from for Reactive Force Factors Deployed from **Adjacent Theaters** CONUS Resulting Combat Factors Based on Resulting Combat Factors Based on Modernization Level Modernization Level Force Force Factors Factors

Figure 10.3. Readiness Impact on Combat Factors

Baseline Combat		ing Con ness Lev		tors Ba	sed or
Factors	90%	80%	70%	60%	50%
1	1	1	0	0	0
2	1	1	1	1	0
3	2	2	1	1	1
4	3	3	2	1	1
5	4	3	2	2	1
6	5	4	3	2	1
7	6	5	4	3	2
3	7	5	4	3	2
9	8	6	5	4	3
10	9	7	5	4	3
15	13	10	8	6	4
20	18	14	11	8	6
25	22	17	13	10	7
30	26	20	16	12	9
35	30	23	18	14	10
40	35	27	21	16	12
45	39	30	23	18	13
50	43	33	26	20	15

The number of CFs available for a given number of FFs is a function of

- The number of FFs involved
- The Mod Levels of the FFs
- ➤ Whether the FFs originated from within the AOR or were flowed from an adjacent AOR
- Whether the forces were deployed proactively or reactively in response to events or opposing player actions (U.S. player only)
- The Readiness Levels of the FFs (U.S. player only).

Non-U.S. Player Procedure

For non-U.S. players, first subtotal the FFs involved in the action by Mod Level. Further subtotal these by source (originating within theater or within an adjacent theater).

Then, for each subtotal originating in theater, look up the resulting CFs using the In-Theater Combat Factors table (the left-hand table in Figure 10.2) on the Combat Factors from Force Factors mat (Figure 10.1).

For each subtotal flowing from adjacent theaters, calculate the CFs as described, but divide the result in half (rounding up).

Finally, sum all the resulting CFs.

U.S. Player Procedure

For the U.S. player, first subtotal the FFs involved in the action for all unique combinations of the following:

- Source (in theater, adjacent theater, or CONUS)
- Readiness Level
- Mod Level.

Then, for each subtotal, look up the resulting CFs using the appropriate table:

- ➤ Use the In-Theater table for forces already in theater on the turn the action started.
- ➤ Use the CONUS-Sourced Reactive Combat Factors table (the right-hand table in Figure 10.2) on the Combat Factors from Force Factors mat for forces that reactively deployed from CONUS in response to the action.
- ➤ For each subtotal flowing from adjacent theaters, calculate the CFs using the In-Theater table, but divide the result in half (rounding up).

For each group of CFs derived from FFs with less than 100-percent Readiness, use the procedure in the section titled "Combat Factors from Forces with Reduced Readiness" (see Figure 10.3), and sum all the resulting CFs.

Combat Factors from Forces with Reduced Readiness

Reduced readiness resources may result in training shortfalls (fewer than optimal training/steaming days or flying hours), parts or maintenance shortages (fewer fully mission-capable systems) or shortages in supplies (fuel, ordnance, consumables). For the U.S. player, reduced **force readiness** means fewer CFs per FF.

If the U.S. player decides to implement a **tiered readiness** policy, this will likely result in different groups of U.S. FFs with different Readiness Levels, which could result in forces with different Readiness Levels being committed to the same action or event. For each group of CFs derived from FFs with less than 100 percent Readiness, the U.S. player must use the Readiness Impact on Combat Factors table (shown in Figure 10.3) on the Combat Factors from Force Factors mat to determine the number of CFs that result.

Look up the number of CFs in the left-hand column. The resulting CFs are the number in that row with the column heading that matches the Readiness Level of the FFs from which they were derived.

How to Resolve Combat

Unless the card in play specifies otherwise, players should use the ratio of CFs between opposing sides calculated in this section, *rounded down*, to select the appropriate column in CRT A (covered in Chapter Eleven; see Figures 11.1 and 11.2); roll a D10; add all die-roll modifiers; and look up the outcome of the combat interaction.

The outcome from CRT A will typically be part of the two-step resolution process described earlier in Chapter Eight. This result will typically then be used to look up the action or event outcome specified on the card in play or will be referred to the White Cell for final outcome adjudication, which is described in more detail in Chapter Eleven.

11. Resolving Combat and Noncombat Interactions Using Combat **Resolution Table A**

Use the procedures and CRT A on the Combat Adjudication: Combat Resolution Table (CRT) A calculations and procedures mat, shown in Figure 11.1, to adjudicate military force-on-force combat and noncombat interactions in which the ratio of opposing force combat capabilities (usually in terms of CFs) determines what column is used and where differences in Critical Capabilities among participants may modify the die roll.

Use of CRT A (shown in Figure 11.2) will typically be specified on an Action Card or an International Event Card. Blue is usually the United States, NATO/EU, and/or their allies or proxy forces, while Red is usually all other forces and their allies and proxies, but this may be altered by instructions on the card in play.

Figure 11.1. Combat Adjudication

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

COMBAT ADJUDICATION: COMBAT RESOLUTION TABLE (CRT) A

COMBAT RESOLUTION TABLE (CRT) A

D10	Red ≥ 4:1	Red 3:1	Red 2:1	1:1	Blue 2:1	Blue 3:1	Blue ≥ 4:1
< -5	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	Status Quo
-5	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo
-4	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo
-3	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	BLUE Minor Gain
-2	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Gain
-1	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Gain
0	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Gain
1	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain
2	RED Major Gain	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain
3	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	Status Quo	BLUE Minor Gain	BLUE Major Gain
4	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Gain
5	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Gain
6	RED Major Gain	RED Minor Gain	Status Quo	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain
7	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain
8	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
9	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
10	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
11	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
12	RED Minor Gain	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
13	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
14	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain
> 14	Status Quo	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain

USE THIS TABLE to adjudicate military force-onforce combat interactions as specified on the card in play, where the ratio of opposing force combat capability (usually in terms of Combat Factors [CFs]) determines what column is

This table will typically be specified on a player action card or international event card.

Blue is normally U.S., NATO/EU, and their allies and proxy forces, while Red is normally all other forces, but this may be altered by instructions on the card in play.

PROCEDURE

- Unless otherwise specified on the card in play, calculate the opposing combat factors using the table on the "Combat Factors from Force Factors" mat.
- · Choose the appropriate column either from the ratio of opposing force CFs (rounded down), or as stipulated on the card in play; for example,
 - » 3 Blue CFs vs. 2 Red CFs is resolved on the 1:1 column
 - » 5 Blue CFs vs. 2 Red CFs is resolved on the Blue 2:1 column.
- Roll a 10-sided die (D10).
 - » The die roll may be modified (+ or -) by Critical Capability Mod Levels, by force Readiness Level (Blue only), and by any conditions stipulated on the card in play.
- · Use the die roll result from this table to look up the result using the table on the card to determine the corresponding outcome.

Combat Resolution Procedure

Unless otherwise specified on the card in play, calculate the opposing CFs using a table on the Combat Factors from Force Factors calculations and procedures mat (covered in Chapter Ten). Then, choose the appropriate column either from the ratio of opposing force CFs (rounded down) or as specified on the card in play.

For example,

- ➤ If Blue has 3 CFs versus 2 Red CFs, this is resolved on the 1:1 column.
- ➤ If Blue has 5 CFs versus 2 Red CFs, this is resolved on the Blue 2:1 column.

Roll a D10. The die roll may be modified (+ or –) by Critical Capability Mod Levels, by force Readiness Level (Blue only), and by any conditions specified on the card in play.

If Critical Capabilities are involved (as specified on the card), the difference between the best (most capable) Blue and best Red Critical Capability Mod Level on each side is added to the die roll (assuming the United States and/or NATO are Blue).

CRT A is a probability outcome table as part of the two-step resolution procedure described in Chapter Eight. Use the die-roll (probability) result from CRT A to look up the result using the outcome table on the card in play to determine the corresponding action or event outcome.

Pinned Forces

Forces committed to a conflict involving CRT A may be **pinned** to that AOI for some duration (usually one or two turns) following the interaction. Whether forces are pinned, and for how long, may be specified on the card in play or dictated by the White Cell. In both cases, the scale and/or intensity of the conflict will be specified on the card, elaborated on by the players involved, or decided by the White Cell.

Pinned forces may not move or respond to other actions or events unless those actions or events are within the existing AOI (as determined by the White Cell). A "Pinned" marker will be placed on the affected forces, indicating the duration remaining (one or two turns or indefinite duration).

Losses and Reset

Combat losses do not occur in the traditional wargaming sense in Hedgemony (i.e., "damage" or "losses" are not indicated or tracked on forces counters or mats, and losing forces are not removed permanently from the board). The reason is simplicity, combined with the low granularity of forces represented in the game. Instead, if a side suffers a major combat-related defeat, the applicable card or the White Cell may impose an additional cost and/or turn penalty before the forces involved can be used in another action or event.

When a card specifies that "Reset rules apply," 50 percent of the forces committed to a conflict (rounded up) must be sent back (or **reset**) to their **home bases** following the interaction, or after a "Pinned" marker is removed, for an additional turn (home base locations are determined by scenario start conditions or White Cell adjudication). This simulates the time needed to re-constitute or re-equip a force that has suffered significant losses.

For the purposes of these rules, a force's **home base** is either (1) where it started the game (for those forces, such as U.S. forces based OCONUS, that are assumed to be permanently stationed in those locations) or (2) its home country (for forces that were assumed to be temporarily or rotationally deployed away from their home countries or bases). The White

Figure 11.2. Combat Resolution Table A

D10	Red ≥ 4:1	Red 3:1	Red 2:1	1:1	Blue 2:1	Blue 3:1	Blue ≥ 4:1
< -5	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	Status Q
-5	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Q
-4	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Q
-3	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	BLUE Minor G
-2	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor G
-1	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor G
0	RED Major Gain	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Ga
1	RED Major Gain	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Ga
2	RED Major Gain	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Ga
3	RED Major Gain	RED Major Gain	RED Minor Gain	Status Quo	Status Quo	BLUE Minor Gain	BLUE Major Ga
4	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Ga
5	RED Major Gain	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Ga
6	RED Major Gain	RED Minor Gain	Status Quo	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Ga
7	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Minor Gain	BLUE Major Gain	BLUE Major Ga
8	RED Minor Gain	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
9	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
10	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
11	RED Minor Gain	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
12	RED Minor Gain	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
13	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
14	Status Quo	BLUE Minor Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga
> 14	Status Quo	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Gain	BLUE Major Ga

Cell will resolve any disputes pertaining to home bases.

For the U.S. player, when "Reset rules apply" is indicated on the card in play, forces are also reduced in Readiness as follows:

- ➤ 10 percent for Blue gain or Status Quo outcomes
- ≥ 20 percent for Red Minor Gains
- ≥ 30 percent for Red Major Gains.

The U.S. player must then expend RPs per the Readiness Buy-Back tables (see Figure 14.1) to restore forces to higher Readiness Levels (see Chapter Fourteen).

Red players must expend one RP for each reset FF to restore their deployability. Restored forces are ready for play on the following turn.

Example of Combat Adjudication

In this example, a Red player plays an Action Card involving an incursion into a nearby U.S. ally. The card specifies that the action should be resolved on CRT A, that U.S. C4ISR and Red LRF Critical Capabilities will factor into the outcome, and that Red should resolve the action on the RT B "Red Advantage" column if the United States does not respond. This implies a combat interaction in which both force capability and force capacity factor into the outcome. In this example, the details

should be elaborated on by the Red (initiating) player and clarified by the White Cell if there are any uncertainties or disputes.

Assume that the Red player commits three Mod Level 3 FFs to the action and that Red's LRF Mod Level is 3. Assume also that the U.S. player responds with two Mod Level 4 FFs at 80-percent Readiness, redeployed from within the AOR, and that the U.S. C4ISR Mod Level is 4.

- Red has 7 CFs.
 - To get this number, consult the In-Theater Combat Factors table (Figure 10.2). 3 FFs with Mod Level 3 results in 7 CFs.
 - There is no theater redeployment penalty, so Red has 7 CFs.
- The United States has 5 CFs.
 - To get this number, consult the In-Theater Combat Factors table (Figure 10.2). 2 FFs with Mod Level 4 results in 7 CFs.
 - > This result is then modified using the Readiness Impact on Combat Factors table (Figure 10.3). 7 CFs at 80-percent Readiness results in 5 CFs.
 - There is no theater redeployment penalty, so the United States has 5 CFs.
- The ratio of CFs means that the column used on CRT A is 1:1.
 - To get the ratio of CFs, divide the larger number of CFs (in this example, Red's CFs) by the smaller number of CFs (in this example, those of the United States), round down: 7 CFs (Red) divided by 5 CFs (the United States), rounded down, equals 1, resulting in a 1:1 ratio (parity).

- > If the resulting ratio had been anything but 1:1, we would use the columns from the side of the table that had the larger number of CFs (Red side if Red had more CFs, Blue side if Blue had more).
- The difference in best Critical Capability Mod Levels is the dieroll modifier, calculated by taking the difference between the best Blue and best Red Critical Capability Mod Levels, which, in this example, is +1 (in favor of the United States).
 - The best (only) Red Critical Capability Mod Level that applies
 - The best (only) U.S. Critical Capability Mod Level that applies
 - Subtract the Red Mod Level from the U.S. Mod Level and add the resulting number to the die roll:
 - 4 (United States) -3 (Red) = +1 to die roll.
- Recall (from Chapter Eight) that because of the way the resolution tables are constructed in the default scenario, higher die rolls tend to favor Blue, and lower die rolls tend to favor Red (unless otherwise specified on the card in play).
- ➤ In this example, roll a D10 and consult the center (parity) column on CRT A, and add 1 to the die roll.
- The White Cell may put two-turn "Pinned" markers on both U.S. and Red forces counters for this type of action, meaning that these forces cannot be used in any other actions (except those in the immediate vicinity) until after the end of the next turn.

12. Resolving Noncombat Interactions Using Resolution Table B

Use the table and procedures on the Noncombat Adjudication: Resolution Table (RT) B calculations and procedures mat, shown in Figure 12.1, to resolve noncombat interactions between opposing forces. Noncombat interactions are, essentially, everything short of force-onforce combat and can include a variety of day-to-day military operations, from presence, posturing, and exercises to gray zone operations.

Figure 12.2 shows RT B from the Noncombat Adjudication mat. Use of this table will usually be specified on the card in play, where the ratio of forces or some specific set of conditions determines which column is

used. Blue is usually the United States, NATO/EU, and/or their allied or proxy forces, while Red is usually all other forces, but this may be altered by instructions on the card.

Noncombat Resolution Procedure

Choose the appropriate column on RT B either from the ratio of opposing FFs (rounded down) or as specified on the card in play. For each forces counter acting or responding to the action from out of area, divide the number of FFs on the counter by 2, and round any remainder up to the

Figure 12.1. Noncombat Adjudication

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

NONCOMBAT ADJUDICATION: RESOLUTION TABLE B (RTB)

RESOLUTION TABLE B (RTB)

D10	Red Advantage	Parity	Blue Advantage
< -4	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
-4	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
-3	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
-2	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
-1	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
0	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
1	RED Minor Gain	RED Minor Gain	Status Quo
2	RED Minor Gain	RED Minor Gain	Status Quo
3	RED Minor Gain	Status Quo	Status Quo
4	RED Minor Gain	Status Quo	Status Quo
5	Status Quo	Status Quo	BLUE Minor Gain
6	Status Quo	Status Quo	BLUE Minor Gain
7	Status Quo	BLUE Minor Gain	BLUE Minor Gain
8	Status Quo	BLUE Minor Gain	BLUE Minor Gain
9	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
10	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
11	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
12	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain
13	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain
> 13	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain

USE THIS TABLE to adjudicate noncombat interactions as specified on the card in play, where the ratio of forces or some specific set of conditions determines what column is used.

This table will typically be specified on a player Action Card or an Event

Blue is normally U.S., NATO/EU, and their allies and proxy forces, while Red is normally all other forces, but this may be altered by instructions on the card in play.

PROCEDURE

- Choose the appropriate column either from the ratio of opposing force Combat Factors (rounded down), or as stipulated on the card in play; for
 - » 3 Blue Force Factors (FFs) vs. 2 Red FFs is resolved on the Parity column.
 - » 5 Blue FFs vs. 2 Red FFs is resolved on the Blue Advantage column.
- Roll a 10-sided die (D10).
 - » The die roll may be modified (+ or -) by conditions stipulated on the card in play.
- · Use the die roll result from this table to look up the result using the table on the card to determine the corresponding outcome.

Figure 12.2. Resolution Table B

010	Red Advantage	Parity	Blue Advantage
< -4	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
4	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
-3	RED Major	RED Major	RED Minor
	Gain	Gain	Gain
2	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
1	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
0	RED Major	RED Minor	RED Minor
	Gain	Gain	Gain
1	RED Minor Gain	RED Minor Gain	Status Quo
2	RED Minor Gain	RED Minor Gain	Status Quo
3	RED Minor Gain	Status Quo	Status Quo
4	RED Minor Gain	Status Quo	Status Quo
5	Status Quo	Status Quo	BLUE Minor Gain
6	Status Quo	Status Quo	BLUE Minor Gain
7	Status Quo	BLUE Minor Gain	BLUE Minor Gain
8	Status Quo	BLUE Minor Gain	BLUE Minor Gain
9	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
10	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
11	BLUE Minor	BLUE Minor	BLUE Major
	Gain	Gain	Gain
12	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain
13	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain
> 13	BLUE Minor	BLUE Major	BLUE Major
	Gain	Gain	Gain

next whole integer, on the turn of arrival. On subsequent turns, the full FF capacity of the counter is available.

Roll a D10, which may be modified (+ or –) by conditions specified on the card in play, and then use the die-roll result from this table to look up the result using the outcome table printed on the card in play to determine the corresponding action or event outcome.

Pinned Forces

Forces committed to a conflict involving RT B may be pinned to that AOI for some duration (usually one or two turns), although this is less likely to happen in noncombat interactions than in combat interactions. Whether forces are pinned, and for how long, may be specified on the card or dictated by the White Cell. In both cases, the scale and/or intensity of the conflict will be specified on the card, elaborated on by the players involved, or decided by the White Cell.

Pinned forces may not move or respond to other actions or events unless these actions or events are within the existing AOI (as determined by the White Cell). A "Pinned" marker will be placed on affected forces, indicating the duration remaining (one or two turns, or indefinite duration).

Examples

- ➤ If 3 Mod Level 4 Blue FFs go against 2 Mod Level 1 Red FFs, both acting from within the same AOR/proximity, this is resolved on the "Parity" column (Mod Levels do not apply, unless specified on the card in play).
- ➤ If 5 Mod Level 4 Blue FFs go against 2 Mod Level 2 Red FFs, both acting from within the same AOR/proximity, this is resolved on the "Blue Advantage" column (Mod Levels do not apply, unless specified on the card in play).
- ➤ If 5 Mod Level 4 Blue FFs go against 2 Mod Level 1 Red FFs, with Red acting from within the same AOR/proximity but Blue responding from another AOR, this is resolved on the "Parity" column (Mod Levels do not apply unless the card in play specifies otherwise, and, for the first turn of interaction, U.S. FFs are divided by 2, rounded up = 3).

13. Procuring and Modernizing Forces

Procurement of forces is the process of increasing the capacity of a force by buying *new* force structure, in the form of FFs. Procurement may also increase force capability if the new forces are at a higher Mod Level than are existing forces. **Modernization** is the process of upgrading the capability of *existing* forces, usually by materially improving the performance of the equipment the force employs through upgrades in technology.

Although the trade-offs between force capacity and force capability are classic defense strategy concerns, they are also fundamental daily trade-space considerations for force development and force management pro-

fessionals trying to align their portfolios—in terms of current *and* future capability and capacity—with the extant defense strategy.

Use the tables and procedures on the Modernization and Procurement Costs calculations and procedures mat, shown in Figure 13.1, to modernize and/or procure forces. To modernize forces, calculate the cost of modernizing (upgrading) a given number of FFs at some Mod Level to some higher level. To procure forces, calculate the cost of procuring (buying) a given number of FFs at some Mod Level. In either case, the resulting cost is the number in the cell at the intersection of the number of FFs

Figure 13.1. Modernization and Procurement Procedures

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

MODERNIZATION AND PROCUREMENT COSTS

Use the table below to calculate the cost of modernizing a given number of Force Factors (FFs) at some Modernization Level to some higher level.

FORCE MODERNIZATION COST

Cost to Modernize a Given Number of Force Factors to a Higher Level

Force	Char	nge in I	Modern	nization	Level	
Factors	+1	+2	+3	+4	+5	+6
1	1	2	3	4	5	6
2	2	3	4	5	6	7
3	3	4	5	6	7	8
4	4	5	6	7	8	9
5	5	6	7	8	9	10
6	6	7	8	9	10	11
7	7	8	9	10	11	12
8	8	9	10	11	12	13
9	9	10	11	12	13	14
10	10	11	12	13	14	15

Use the table below to calculate the cost of procuring a given number of FFs at some Modernization Level.

FORCE PROCUREMENT COST

Force	Modernization Level									
Factors	1	2	3	4	5	6	7			
1	2	3	4	5	6	7	8			
2	4	6	8	10	12	14	16			
3	6	8	10	12	14	16	18			
4	8	11	14	17	20	23	26			
5	10	13	16	19	22	25	28			
6	12	16	20	24	28	32	36			
7	14	18	22	26	30	34	38			
8	16	21	26	31	36	41	46			
9	18	23	28	33	38	43	48			
10	20	26	32	38	44	50	56			

 $\frac{PLAYERS}{PLAS} \ \frac{THESE}{TABLES} \ \text{to either modernize existing forces to higher modernization} \ \text{(combat capability) levels or procure (buy) new FFs (i.e., increase force structure)}.$

Forces may only be modernized or procured up to a player's National Tech Level.

MODERNIZATION VS. PROCUREMENT

- The least costly way to increase combat capability in the game is to modernize existing forces.
- The next-most-efficient way to increase combat capability is to procure forces at a higher Modernization Level, which also grows force structure, which is an increase in force capacity.
- The most expensive way to increase combat capability is to procure lower—Modernization Level forces and then modernize them. (It is roughly 1.2 times more expensive than procuring to a given Modernization Level outright.)
- The U.S. player must also consider force size, because each new FF on the board increases the annual Readiness cost (this cost is independent of Modernization Level), which makes modernizing existing forces even more cost-efficient for the U.S. player.

MODERNIZATION PROCEDURE

- During players' action-investment phases, players may play a modernization card that permits them
 to modernize up to some percentage of their existing FFs (force structure) to a higher Modernization
 (combat capability) Level (as specified on the card).
- Specify which FFs (on the board) are to be modernized (up to the percentage specified on the card, rounded down).
- Look up the number of FFs in the left-hand column of the Force Modernization Cost table at top left.
- The Resource Point (RP) cost is the number in the column on that row corresponding to the desired change in Modernization Level.
- The resulting Modernization Level may not exceed the player's National Tech Level.
- Modernized forces are available immediately.

PROCUREMENT PROCEDURE

- U.S. and NATO/EU players may procure forces during their planning and action phase, and these forces
 are available immediately.
- All other players may procure forces at the end of their turn, and those forces are available on the next turn during their action and investment phase, or in reaction to U.S. or NATO/EU actions.
- Specify the number of FFs to be procured.
- Look up the number of FFs in the left-hand column of the Procurement Cost table at bottom left.
- The RP cost is the number in the column on that row corresponding to the desired Modernization Level.
- The Modernization Level may not exceed the player's National Tech Level.

that a player wants to modernize or procure and the Mod Level change or target, respectively, that the player wants to achieve.

Procurement Versus Modernization

The least costly (most efficient) way to increase combat capability in the game is to modernize existing forces. The next most efficient way to increase combat capability is to procure new forces at a higher Mod Level, which also grows force structure and results in increased force capacity. The most expensive way to increase combat capability is to procure new forces at a lower Mod Level and then modernize them. Although the differences vary by the number of FFs being modernized, on average, it is roughly 1.2 times more expensive to "mod up" than it is to procure a given Mod Level outright. "Buying low and modding up" also takes longer to deliver capability (because the player must first procure the forces on one turn and then modernize them in a later turn). Although modernization is a more efficient way to upgrade combat capability than is buying new forces in the short term, if a larger force structure is desired as part of a player's strategy, then it is more efficient in the long term (in both resources and time) to buy directly at the desired Mod Level than it is to buy low Mod Level forces and modernize them later.

Total force size (the total number of FFs in play) represents more than just a capacity consideration for the U.S. player, because each new FF on the board increases the U.S. player's per-turn readiness cost (and this cost is independent of Mod Level). This makes modernizing existing forces even more cost-efficient for a U.S. player who wants to improve combat capability.

Although non-U.S. players do not have to account for the cost of sustaining their forces' readiness, it is still cheaper for them to modernize existing forces than to procure additional forces if the strategy goal is to increase force capability to achieve some level of overmatch in combat operations. On the other hand, because a force can be in only one place at a time, if the strategy goal is to do more in more places in the world and have a reasonable expectation of favorable outcomes in all those places, then capacity may become the higher priority, and procurement may be necessary.

Procuring or modernizing proxy forces (forces of partner nations or actors willing to support a player's strategy, normally "for a price") are options for both U.S. and non-U.S. players, with the (important) caveat that the levels and stability of their willingness and reliability to support a sponsor's strategy are rarely certain.

Players need to consider both the military capabilities and capacity that might be needed to accomplish their strategic objectives. A strategy founded on noncombat operations, for example, may need to consider only force size (capacity, "boots on the ground") because technology might not play a large role in the outcomes of the intended actions. It may be "good enough" to procure cheap forces (which could also be proxy forces) to enable such a strategy. On the other hand, a strategy calling for overmatch in one or more capability areas against one or more adversaries will always put a premium on the Mod Levels of at least some portion of a player's forces relative to the adversary's.

For the U.S. player, a way to achieve "cheap force capacity" can be either low-Mod-Level forces at high Readiness Levels or high-Mod-Level forces at lower Readiness Levels. Also, the levels of Readiness for the U.S. player may vary across the force (this is called **tiered readiness**). For non-U.S. players, inexpensive force capacity means lower-Mod-Level forces. For all players, the Mod Levels of their forces may vary across the force to suit their particular strategies and resource constraints.

The procedures for procuring and modernizing forces are detailed in the following sections.

Procurement Procedure

U.S. and NATO/EU players may procure forces during Blue's Investments and Actions Phase by playing a Procure New Forces Investment Card, and these forces are available for play immediately. All other players may procure forces at the end of their turn by playing a Procure New Forces Investment Card, and those forces are available for play on the next turn during their Investments and Actions Phase, or in reaction to U.S. or NATO/EU actions during the Blue players' turns. The Procure New Forces card does not count against Red players' per-turn card costs/ limits, and the card does not cost anything to play—the costs are the costs of the forces procured, as calculated below. Forces may be procured every turn, as long as players have the resources.

First, specify the number of FFs to be procured. Then, look up the number of FFs in the left-hand column of the Force Procurement Cost table (shown in Table 13.1) on the Modernization and Procurement Costs calculations and procedures mat (shown in Figure 13.1). The RP cost is the number in the column on that row corresponding to the desired Mod Level for the procured forces.

A force's Mod Level may not exceed the player's National Tech Level.

Procurement Cost Calculation Examples

- ➤ Buying four Mod Level 3 FFs costs 14 RPs.
- ➤ Buying two Mod Level 5 FFs costs 12 RPs.

Modernization Procedure

During players' Investments and Actions Phase, they may play a modernization Investment Card that permits them to modernize up to some percentage of their existing FFs (force capacity) to a higher Mod Level (as specified on the card).

First, specify which FFs (on the board) are to be modernized (up to the percentage specified on the card, rounded down). Then, look up the number of FFs in the left-hand column of the Force Modernization Cost table (shown in Table 13.2) on the Modernization and Procurement Costs calculations and procedures mat. The RP cost is the number in the column on that row corresponding to the desired change in Mod Level.

Forces may not be modernized in the same turn in which they are procured. Neither may forces that have been pinned. Modernized forces are available for play immediately—replace the existing forces counter (wherever it may be on the game board, unless otherwise specified by an event or a card in play) with the equivalent number of FFs at the higher Mod Level.

Modernization Cost Calculation Examples

- ➤ Modernizing 2 Mod Level 2 FFs from 2 to 3 (+1) costs two RPs.
- ➤ Modernizing 3 Mod Level 3 FFs from 3 to 5 (+2) costs two RPs.

Retirement Procedure

An option available to the U.S. player to control costs is to reduce force structure by "retiring" forces from play. Forces may be retired only if they start the turn in CONUS—and only after their readiness costs have been paid for that turn (at whatever level of readiness they had at the beginning of the turn). The U.S. player may retire forces during any Blue Investments and Actions Phase by announcing this as an action and then simply taking one or more CONUS FFs off the board. The resources freed may then be used on subsequent turns. Once forces have been retired, the only way for the U.S. player to restore them is to procure them, using the procurement procedures described earlier in this chapter.

Although there are no constraints on how often it may be done, the decision to reduce force structure (or to buy it back again later) should be consistent with the U.S. player's stated strategy objectives at the start of the game.

Table 13.1. Force Procurement Cost

Table 13.2. Force Modernization Cost

FORCE PROCUREMENT COST

Cost to Buy New Force Factors

Force	Mode	ernizat	ion Le	vel			
Factors	1	2	3	4	5	6	7
1	2	3	4	5	6	7	8
2	4	6	8	10	12	14	16
3	6	8	10	12	14	16	18
4	8	11	14	17	20	23	26
5	10	13	16	19	22	25	28
6	12	16	20	24	28	32	36
7	14	18	22	26	30	34	38
8	16	21	26	31	36	41	46
9	18	23	28	33	38	43	48
10	20	26	32	38	44	50	56

FORCE MODERNIZATION COST

Cost to Modernize a Given Number of Force Factors to a Higher Level

Force	Chang	ge in M	oderniz	zation l	evel	
Factors	+1	+2	+3	+4	+5	+6
1	1	2	3	4	5	6
2	2	3	4	5	6	7
3	3	4	5	6	7	8
4	4	5	6	7	8	9
5	5	6	7	8	9	10
6	6	7	8	9	10	11
7	7	8	9	10	11	12
8	8	9	10	11	12	13
9	9	10	11	12	13	14
10	10	11	12	13	14	15

14. Maintaining U.S. Readiness

The U.S. player must spend resources each turn to maintain the readiness of their forces. Readiness is a measure of a force's deployability, sustainability, and operational proficiency. It is typically represented as the percentage of a force's equipment, training, maintenance, and sustainment requirements that are funded; Hedgemony abstracts all of those factors in a single aggregate percentage. If a force has 100 percent Readiness, then it is fully "combat ready." As readiness is reduced, a force's ability to deploy, remain in the field, and execute its missions is degraded. This degradation is represented in a reduction in CFs, which affects a force's ability to prevail in combat interactions with adversaries. The amount that each reduction in readiness affects U.S. forces' available CFs is shown in the Combat Factors from Force Factors calculations and procedures mat, covered in Chapter Ten. Non-U.S. players do not need to explicitly account for the readiness of their forces. In Hedgemony, the readiness of non-U.S. forces is abstracted in players' force structure and force Mod Levels.

Reduced readiness may also affect noncombat interactions or events. In such cases, the specific conditions or constraints will be specified on the card in play.

The procedures and tables on the U.S. Readiness Costs calculations and procedures mat, shown in Figure 14.1, are used to calculate the per-turn costs of maintaining a certain number of U.S. FFs at a given level of readiness. The U.S. player can "configure" their forces' readiness any way they like. They can fund all of their forces to a uniform Readiness Level (i.e., the same Readiness Level for every FF), or they can fund different proportions of their FFs to different Readiness Levels (this is referred to as tiered readiness). The U.S. player should consider the following:

- As Readiness Levels increase, so do costs in RPs to maintain them.
- As Readiness Levels decrease, the number of available CFs from a given number of FFs goes down.
- It costs more RPs to maintain the readiness of forces deployed OCONUS than it does to maintain the same level of readiness in CONUS.
- Although it costs significantly more RPs to buy back readiness to a given level during the turn in which it is needed than it costs per turn to maintain readiness, tiered readiness saves resources on turns where some U.S. force capabilities or capacity might not be needed to achieve U.S. strategic objectives.
- > Tiered readiness carries risks that some military capability and/or capacity will not be available when needed, particularly if the U.S. player reserves few resources for contingencies during a turn.

These cost characteristics form the main incentives to improve capability over capacity (force structure), but at the price of reducing the number of places in the world in which U.S. forces can be expected to prevail in larger conflicts.

Per-Turn Readiness Cost Calculation Procedure

The U.S. player must pay a "readiness bill" (in RPs) before making any other investments or taking any other actions during the Blue Investments and Actions Phase. This bill usually is a substantial portion of the U.S. player's per-turn resource allocation (by design in the default scenario). Therefore, it is best to calculate this bill first, to get a sense for how many RPs will remain to pay for planned (proactive) investments and actions and to provide resources for the United States to hedge against the possible need to react to Red actions and any events that might emerge during the course of a turn.

First, subtotal the number of U.S. FFs in CONUS at each Readiness Level. Then, look up the corresponding cost of each subtotal on the CONUS Readiness Sustainment Cost table (the left-hand table in Figure 14.2) on the U.S. Readiness Costs calculations and procedures mat, and sum the results.

Repeat this procedure for all U.S. FFs deployed OCONUS, this time looking up the costs on the OCONUS Readiness Sustainment Cost table (the right-hand table in Figure 14.2). Then, sum the CONUS and OCONUS Readiness costs. This is the per-turn cost (in RPs) for the given force posture and Readiness configuration.

The U.S. player may choose any configuration of Readiness Levels across the force, including different numbers and mixes of Readiness Levels for both CONUS and OCONUS forces. Readiness Level markers are provided for the U.S. player to keep track of the Readiness Levels of each group of forces. The White Cell will assist in placing and keeping track of these markers.

Readiness Buy-Back Cost Procedure

If the U.S. player chooses to under-resource some portion of U.S. force readiness (a likely policy in the default scenario), then they have the option of "buying back" readiness to a higher level at any point during a turn where the U.S. player may take an action (i.e., proactively or reactively) or make an investment. The typical situations where the U.S. player might want to do this are either in response to a Red action, where a higher Readiness Level is desired to maximize the available CFs, or to maximize the capabilities available for forces to support a proactive U.S. action.

To buy back readiness from a lower to higher level, the U.S. player uses either the CONUS Readiness Buy-Back Cost table or the OCONUS Readiness Buy-Back Cost table, both shown in Figure 14.3, on the U.S. Readiness Costs calculations and procedures mat to look up the one-time RP cost for each group of FFs (wherever they might be at the time) to be upgraded by a given percentage to a higher Readiness Level.

Once forces are upgraded, per-turn readiness sustainment costs for the higher Readiness Level apply on subsequent turns until the U.S. player chooses to once again reduce the Readiness Level of some number of FFs. There is no cost to reduce a given force's Readiness Level, but savings are available only on subsequent turns.

Because Hedgemony allows the U.S. player to configure readiness on an individual FF basis and because of the complexity of these calculations, copies of a worksheet (shown in Figure 14.4) are supplied with the game to assist the U.S. player in calculating the total per-turn readiness sustainment cost. Round U.S. readiness percentage marker chits are also provided in different denominations to facilitate keeping track of different Force Factors' readiness levels. Simply place the appropriate chit on the affected stack of forces counters.

The U.S. player should pay the readiness bill (the number in the "Total Readiness cost: (a) +(b) = (c)" box in the bottom-right corner of the worksheet) for U.S. forces at the beginning of the Blue Investments and Actions Phase of every turn. These costs must be paid before reducing the readiness of any forces, which means that any savings gained from doing so are only available on subsequent turns.

If, later in a turn, the U.S. player finds that they have no remaining resources to respond to a Red action or an International Event, the U.S.

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

U.S. READINESS COSTS

Use the tables below to calculate the per-turn Readiness sustainment costs of a given number of U.S. Force Factors (FFs) in CONUS or deployed OCONUS.

CONUS READINESS SUSTAINMENT COST

OCONUS READINESS SUSTAINMENT COST

Per-Turn Costs for Different Force Sizes and Readiness Levels

Force	Readi	ness				
Factors	100%	90%	80%	70%	60%	50%
1	1	1	1	1	1	1
2	2	2	2	2	2	1
3	3	3	3	2	2	2
4	4	4	3	3	3	2
5	5	5	4	4	3	3
6	6	5	5	4	4	3
7	7	6	5	5	4	4
8	8	7	6	5	5	4
9	9	8	7	6	5	5
10	10	9	8	7	6	5
15	15	13	11	10	9	8
20	20	17	15	13	12	10
25	25	21	18	16	14	13
30	30	25	22	19	17	15

Per-Turn Costs for Different Forc	e Sizes and
Readiness Levels	

Force	Readi	ness				
Factors	100%	90%	80%	70%	60%	50%
1	2	2	2	2	2	2
2	4	4	4	4	4	2
3	6	6	6	4	4	4
4	8	8	6	6	6	4
5	10	10	8	8	6	6
6	12	10	10	8	8	6
7	14	12	10	10	8	8
8	16	14	12	10	10	8
9	18	16	14	12	10	10
10	20	18	16	14	12	10
15	30	26	22	20	18	16
20	40	34	30	26	24	30
25	50	42	36	32	28	26
30	60	50	44	38	34	30

Use the tables below to calculate the one-time cost of buying back the Readiness Level of a given number of U.S. FFa in CONUS or deployed OCONUS.

CONUS READINESS BUY-BACK COST

The Cost to Restore Readiness by a Given

Force	Change in Readiness								
Factors	+10%	+20%	+30%	+40%	+50%				
1	1	2	3	4	5				
2	2	3	4	5	6				
3	3	4	5	6	7				
4	4	5	6	7	8				
5	5	6	7	8	9				
6	6	7	8	9	10				
7	7	8	9	10	11				
8	8	9	10	11	12				
9	9	10	11	12	13				
10	10	11	12	13	14				
15	15	16	17	18	19				
20	20	21	22	23	24				
25	25	26	27	28	29				
30	30	31	32	33	34				

OVERSEAS READINESS BUY-BACK COST

The Cost to Restore Readiness by a Given

Force Factors	Change in Readiness							
	+10%	+20%	+30%	+40%	+50%			
1	2	3	4	6	7			
2	3	4	6	7	8			
3	4	6	7	8	10			
4	6	7	8	10	11			
5	7	8	10	11	12			
6	8	10	11	12	14			
7	10	11	12	14	15			
8	11	12	14	15	16			
9	12	14	15	16	17			
10	14	15	16	17	19			
15	20	21	23	24	25			
20	27	28	29	30	32			
25	33	34	36	37	38			
30	40	41	42	43	45			

THE U.S. PLAYER uses the tables on this mat to calculate the per-turn and one-time buy-back cost of force Readiness.

Non-U.S. players do not have to track or pay for Readiness.

PER-TURN READINESS COST PROCEDURE

- Subtotal the number of FFs in CONUS at each Readiness Level.
- Look up the corresponding cost of each subtotal on the "CONUS Readiness Sustainment Cost" table (at far left).
- · Sum the results.
- Repeat the above procedure for forces deployed overseas, except look up the costs on the "Overseas Readiness Sustainment Cost" table (at near left).
- Sum the CONUS and OCONUS Readiness costs—this is the per-turn cost (in Resource Points [RPs]) for the given force posture and Readiness configuration.
- The U.S. player may choose any configuration of Readiness Levels across the force, including different numbers of different Readiness Levels for both CONUS and OCONUS forces.

READINESS BUY-BACK COST PROCEDURE

- To "buy back" Readiness from a lower to higher level, the U.S. player uses the corresponding CONUS (far left) or overseas (near left) Buy-Back Cost tables to calculate the one-time RP cost for raising the Readiness of a number of factors by a given percentage.
- These transactions may take place at any point during a turn where the U.S. player may take an action (i.e., active or reactive) or make an investment.
- If the forces involved are being employed on the same turn in an action involving Combat Resolution Table A (CRT A), the CONUS-Sourced Reactive Combat Factors table (see Figure 10.2 in the rulebook) must be used to calculate their resulting Combat Factors.
- Once forces are upgraded, per-turn Readiness sustainment costs for the higher Readiness Level apply.

player can appeal to the White Cell for an allocation of "emergency" funding (e.g., Overseas Contingency Operations) to cover the response. Although such allocations can be teaching points during the game, they should be the exception. Whether to allocate, and how much to allocate, may also be decided by die roll. The White Cell will adjudicate.

Figure 14.2. U.S. Readiness Sustainment (Per-Turn) Costs

CONUS READINESS OCONUS READINESS SUSTAINMENT COST SUSTAINMENT COST Per-Turn Costs for Different Force Sizes and Per-Turn Costs for Different Force Sizes and Readiness Levels Readiness Levels Readiness Force Force Readiness Factors Factors 100% 90% 80% 70% 60% 50% 100% 90% 80% 70% 60% 50%

Figure 14.3. U.S. Readiness Buy-Back Costs

CONUS READINESS BUY-BACK COST					OVERSEAS READINESS BUY-BACK COST							
The Cost Amount	to Rest	ore Rea	diness b	y a Give	n	The Cost	t to Rest	ore Rea	diness b	y a Give	n	
Force	Chang	e in Rea	diness			Force	Chang	e in Rea	diness			
Factors	+10%	+20%	+30%	+40%	+50%	Factors	+10%	+20%	+30%	+40%	+50%	
1	1	2	3	4	5	1	2	3	4	6	7	
2	2	3	4	5	6	2	3	4	6	7	8	
3	3	4	5	6	7	3	4	6	7	8	10	
4	4	5	6	7	8	4	6	7	8	10	11	
5	5	6	7	8	9	5	7	8	10	11	12	
6	6	7	8	9	10	6	8	10	11	12	14	
7	7	8	9	10	11	7	10	11	12	14	15	
8	8	9	10	11	12	8	11	12	14	15	16	
9	9	10	11	12	13	9	12	14	15	16	17	
10	10	11	12	13	14	10	14	15	16	17	19	
15	15	16	17	18	19	15	20	21	23	24	25	
20	20	21	22	23	24	20	27	28	29	30	32	
25	25	26	27	28	29	25	33	34	36	37	38	
30	30	31	32	33	34	30	40	41	42	43	45	

U.S. Readiness Calculation Worksheet

CONUS READINESS SUSTAINMENT COST

Per-Turn Costs for Different Force Sizes and Readiness Levels

Force	Readi	ness				
Factors	100%	90%	80%	70%	60%	50%
1	1	1	1	1	1	1
2	2	2	2	2	2	1
3	3	3	3	2	2	2
4	4	4	3	3	3	2
5	5	5	4	4	3	3
6	6	5	5	4	4	3
7	7	6	5	5	4	4
8	8	7	6	5	5	4
9	9	8	7	6	5	5
10	10	9	8	7	6	5
15	15	13	11	10	9	8
20	20	17	15	13	12	10
25	25	21	18	16	14	13
30	30	25	22	19	17	15

OCONUS READINESS SUSTAINMENT COST

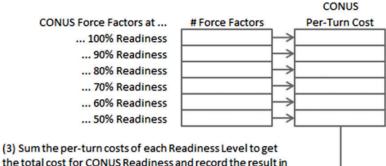
Per-Turn Costs for Different Force Sizes and Readiness Levels

Force	Readiness								
Factors	100%	90%	80%	70%	60%	50%			
1	2	2	2	2	2	2			
2	4	4	4	4	4	2			
3	6	6	6	4	4	4			
4	8	8	6	6	6	4			
5	10	10	8	8	6	6			
6	12	10	10	8	8	6			
7	14	12	10	10	8	8			
8	16	14	12	10	10	8			
9	18	16	14	12	10	10			
10	20	18	16	14	12	10			
15	30	26	22	20	18	16			
20	40	34	30	26	24	30			
25	50	42	36	32	28	26			
30	60	50	44	38	34	30			

Calculate the total Readiness cost for U.S. forces in CONUS and overseas at various Readiness Levels using the following procedure:

- boxes below.
- (1) Add up the numbers of Force Factors (2) Look up the corresponding cost for each in CONUS at each Readiness Level in the number of Force Factors at a given Readiness Level in the table at left and record them in the boxes below.

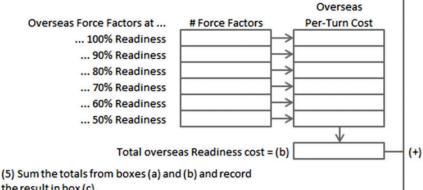
Turn #



the total cost for CONUS Readiness and record the result in box (a).

Total CONUS Readiness cost = (a)

(4) Repeat the same procedure as above for U.S. forces deployed overseas, using the table at left, and record the result in box (b).



the result in box (c).

Total Readiness cost: (a) + (b) = (c)

15. Proxy Forces

Players may employ proxy forces (third-party allied or partner forces) to support their actions in the game. Such employment may be obtained for a price, and doing so carries with it varying degrees of reliability and risk, depending on the proxy and the situation. Proxies may be called for on a card in play; may be instantiated on the fly on a case-by-case basis, in discussion with the White Cell; or may be scripted or represented by one of the players, as part of the scenario.

Figure 15.1 shows the mat that describes the procedures for employing proxy forces in the game. In play, proxy forces are represented by

gray forces counters, and they behave exactly like other non-U.S. forces in combat and noncombat actions. The actual or potential existence of proxies in a particular game session; what conditions might need to be satisfied before proxies will participate; their specific capabilities, Mod Levels, and numbers; and how they will be represented should all be adjudicated by the White Cell and agreed upon before the game starts. Conditions typically also include some amount of RP commitment by the sponsoring player (e.g., the player provides two RPs over three turns for a commitment by the proxy to procure two Mod Level 3 FFs that

Figure 15.1. Proxy Forces

HEDGEMONY ♦ CALCULATIONS & PROCEDURES

PROXY FORCES

PLAYERS MAY EMPLOY proxy forces (for a price, and with varying degrees of reliability, depending on the proxy and the situation) to support their actions in the game. Proxy forces represent adjunct nations or actors whose participation as partners or allies to a particular side in the scenario helps serve the learning objectives of the Blue players. Proxies may be instantiated on the fly on a case-by-case basis in discussion with the White Cell, or be scripted or represented by one of the players as part of the scenario. In play, proxy forces are represented by gray Force Factor (FF) chits, and they behave exactly like other non-U.S. forces in combat and noncombat actions. The actual or potential existence of proxies in a particular game and how they will be represented should be agreed to before the game starts, and their specific capabilities and numbers will be adjudicated by the White Cell.

Proxy participation involves a multi-step process of answering the following questions, adjudicated case by case for each proxy, for each action. Each step involves a die roll in context of the proxy's assessed reliability, as follows:

- Step 1: How willing / reliable is the proxy likely to be to support the sponsor in the game?
- Step 2: How reliable is the proxy likely to be to develop / commit forces in support of sponsor actions?
- Step 3: For any given action, how reliable is the proxy likely to be to actually employ their forces as the sponsor intended?

HOW TO DETERMINE WHETHER A PROXY WILL PARTICIPATE:

- · The proxy must agree, as determined by the scenario or in case-by-case player discussion in-game, adjudicated by the White Cell.
- Then, an assessment is made of the proxy's reliability (certain, high, medium, or low), any scope or geographic restrictions or constraints on participation, and whether sponsor forces (the player being assisted) need to be present or participate as a condition of employment.
- Roll a 10-sided die (D10) and consult the table at right based on the proxy's assessed participation-reliability.
- Success = the proxy participates; failure = the proxy does not participate.

HOW TO DETERMINE WHETHER A PROXY'S CAPABILITIES OR FORCE STRUCTURE CAN BE DEVELOPED:

Use the following steps each time a player wants to modernize or procure proxy forces by contributing one or more Resource Points (RPs):

- · Determine the percentage cost the sponsor must contribute to the proxy for modernization or procurement in player discussion in-game, adjudicated by the White Cell.
- Roll a D10 and consult the table at right based on the proxy's assessed development-reliability.
- Use the modernization or procurement cost tables to calculate force development results. (See Chapter Fourteen of the rulebook.)
- Success = The modernized or procured forces are delivered as intended.
- Failure = The forces are not modernized or procured as intended:
 - » For modernization, the resulting Mod Level delivered is 1 less than intended—if the intended Mod Level was +1, it means the modernization failed completely.
 - » For procurement, 1 less FF is delivered than intended—if the intended procurement was 1 FF, it means the intended forces are not delivered at all.
- · Modernized or procured proxies are available for employment on the following turn.

Use the table below to resolve the reliability of proxy forces in supporting a players' actions.

PROXY FORCES RELIABILITY

D10	Certain	High	Medium	Low		
0	Success	Failure		Failure		
1		Failure	Failure			
2		Success	rallure			
3						
4			Success			
5	100%					
6		80%		Success		
7			60%			
8				40%		
9						

HOW TO DETERMINE WHETHER A PROXY CAN BE EMPLOYED IN A NONCOMBAT OR COMBAT ACTION:

- Discuss with ally expert on employment suitability (gray-zone vs. conventional threats).
- · Assess whether sponsor forces must be present in the region or participate before proxy will agree to employment (based on expert assessment).
- Roll a D10 and consult the table at right based on the proxy's assessed employment-reliability.
- Success = The proxy forces contribute as intended—resolve the action using the appropriate tables as indicated on the card in play.
- Failure = The proxy forces do not participate in the action or contribute to its outcome.

then can be employed when called for by the sponsor, within certain appropriate scenario-specific constraints).

Proxy Reliability

A key consideration for players planning to employ proxies as part of their strategies is whether or not a proxy will actually follow through on whatever the alliance or partnership agreement might have been when the proxy is called on to act or support the sponsoring player's actions in a given situation. We provide the following multi-step process, adjudicated case-by-case for each proxy, for *each* action or event involving the potential employment of proxy forces. The reason this procedure is done on a case-by-case basis is that ally or partner reliability is often highly circumstantial, and there are instances in which an otherwise very reliable ally or partner may be reluctant to support a given action because of specific national or regional circumstances or implications related in some way to the specific action or participants.

Each of the following steps in this process involves a die roll to determine the proxy's reliability:

- Step 1. Determine how willing or reliable the proxy is likely to be to support the sponsoring player in the game.
- ➤ Step 2. Determine how reliable the proxy is likely to be to develop or commit forces in support of the sponsor's actions.
- ➤ Step 3. For any given action, determine how reliable the proxy is likely to be to employ its forces as the sponsor intended in that action.

The procedures for adjudicating proxy reliability are outlined in the following sections, and Figure 15.2 shows the table from the Proxy Forces calculations and procedures mat (Figure 15.1) used to resolve each of the reliability steps.

How to Determine Whether a Proxy Will Participate

First, the proxy must agree to participate, as determined by the scenario or case-by-case in-game player discussion, adjudicated by the White Cell. Then, an assessment is made of the proxy's likely reliability (certain, high,

Figure 15.2. Proxy Forces Reliability

PROXY FORCES RELIABILITY

D10	Certain	High	Med	Low		
0	Success	Fail				
1		ган	Fail			
2		Success	raii	Fail		
3				ган		
4			Success			
5	100%	80%				
6				Success		
7			60%			
8				40%		
9						

medium, or low), any scope or geographic restrictions or constraints on participation, and whether sponsor forces (the player being assisted) need to be present or participate as a condition of employment. For planning purposes, it is beneficial to a game's learning objectives if at least one of the Red players or the NATO/EU player has some expertise to perform this assessment. If such expertise is not available, then a little pre-game research into the relevant history of the region or nations involved may provide enough information for a credible assessment.

- ➤ Roll a D10 and consult the Proxy Forces Reliability table (Figure 15.2) shown on the Proxy Forces calculations and procedures mat based on the prior assessment of proxy force development-reliability.
 - ➤ "Success" means that the proxy participates.
 - ➤ "Failure" means that the proxy does not participate.

How to Determine Whether a Proxy's Capabilities or Force Structure Can Be Developed

When a player wants a proxy to develop (procure) or modernize forces to support their strategic objectives, an on-the-fly assessment needs to be made of the likelihood that a proxy would be capable of delivering the intended force capabilities. As in the previous section, a player with the requisite country or regional expertise to make an informed assessment of the proxy's likely reliability in developing or modernizing military capabilities is valuable. In the absence of such expertise, pre-game research might be required.

Each time a player wants to pay RPs to incentivize or compel a proxy to modernize or procure forces, use the following procedure:

- ➤ Step 1. Determine the percentage cost that the sponsor must contribute to the proxy for modernization or procurement in player discussion in-game, adjudicated by the White Cell.
- ➤ Step 2. Then, use the Modernization and Procurement Costs calculations and procedures mat (Chapter Thirteen) to calculate force development results and pay the associated modernization or procurement costs.
- ➤ Step 3. After the modernization or procurement costs have been paid, roll a D10 and consult the Proxy Forces Reliability table (Figure 15.2) shown on the Proxy Forces calculations and procedures mat based on the prior assessment of proxy force development-reliability.
 - "Success" means that the modernized or procured forces are delivered as intended.
 - "Failure" means that the forces are not modernized or procured as intended.

For failed modernization, assume that the resulting Mod Level delivered is one less than intended (e.g., if the intended Mod Level was +1, then the modernization failed completely).

For failed procurement, assume that one fewer FF is delivered than intended (e.g., if the intended procurement was 1 FF, then the intended forces were not delivered at all).

Assume that modernized or procured proxies are available for employment on the subsequent turn.

How to Determine Whether a Proxy Can Be **Employed in a Noncombat or Combat Action**

When an action or event calls for employment of a proxy (either because it was specified on the card or because the player stated that it was their intention to employ proxies), an on-the-fly assessment needs to be made of the likelihood that the proxy will participate as intended under the given circumstances. Again, discussing this with a suitable country or region expert is useful, especially in circumstances that involve gray zone versus conventional threats. Pre-game research might be needed if the requisite expertise is not available.

First, determine whether sponsor forces must participate or be present in the region before the proxy will agree to employment. Then, roll a D10, and consult the Proxy Forces Reliability table (Figure 15.2), shown on

the Proxy Forces calculations and procedures mat based on the proxy's assessed employment reliability.

- > "Success" means that the proxy forces contribute as intended. Resolve the action using the appropriate tables, as indicated on the card in play.
- ➤ "Failure" means that the proxy forces do not participate in the action or contribute to its outcome.

Appendix: Creating or Modifying Scenarios

Hedgemony was specifically designed to be adaptable to a variety of different scenarios. A scenario is a prerequisite for every Hedgemony game session. The scenario provides assumptions about the actors, the security environment, the geopolitical situation, the state of military forces, and other relevant conditions that will serve as background context for the game session. The default scenario packaged with Hedgemony is a vague reflection of world conditions as they existed in 2017, along with a due-diligence set of hypothetical potential conflicts that could emerge from such conditions.

Scenario Components

A session scenario in Hedgemony is composed of the following:

- ➤ A set of Action and Investment Card decks (one deck for each player)
- ➤ A set of player-specific Domestic Event Card decks (for the White Cell)
- An International Event Card deck (for the White Cell)
- ➤ A set of Starting Conditions
- ➤ A set of Victory Conditions
- A set of freestanding player screens summarizing the Starting and Victory Conditions (one screen per player)
- The set of rules in effect for the session (which also may include additional cards and marker chits).

The default scenario includes all of the components listed *and* this rule-book, because the content on the cards, the Victory Conditions, and the Starting Conditions all make some assumptions about the rules. That said, the Hedgemony rules can accommodate significant changes to the scenario, Starting Conditions, and Victory Conditions as long as the implications of these changes are understood and the implicit boundary conditions defined by the rules are not exceeded. The key defining components for any Hedgemony scenario are the Action, Investment, and Event Card decks. Think of each card as a scenario vignette and each card deck as a representative catalog of such vignettes that, together, help define the scenario. That each card summarizes a situation and the actors involved and then explains how those actors can resolve the situation is one of the features that makes Hedgemony so adaptable to new scenarios.

How to Develop a Hedgemony Session Scenario

Designing a scenario broadly involves the following tasks:

- > Define the specific learning objectives for Blue.
- ➤ Decide on the number of sides (Red players) needed to facilitate Blue learning objectives and which sides need to be live or scripted.
- ➤ Determine the types of interactions between players and the International or Domestic Events that together will support Blue learning objectives.
- Decide what game map is needed (if the global map is not suitable).
- ➤ Define the Critical Capabilities to assign to each player.

- > Define the relative force levels (number of FFs) and Mod Levels for each side's forces.
- Define the Starting Conditions and per-turn resource allocations for each side.
- Define specific game objectives (i.e., Victory Conditions) for each player.
- Decide on the number of turns needed to facilitate Blue's learning objectives.
- ➤ Define the initial **force laydown** for all of the players' forces.

Before developing an alternative to the default scenario, the facilitators should consider a few questions whose answers will fundamentally shape the designer's course of action:

- ➤ What is the game about? (What are the types of considerations that the game is intended to test or stress? What are the types of learning objectives that the game is intended to teach?)
 - ➤ If the answers to this question are not essentially the same as those for the game described in this rulebook, then stop. In this case, the task is designing not a new scenario but a new game (likely with new rules).
- ➤ Does the alternative scenario stress the same fundamental trade space of factors described in this rulebook and the player guide (albeit possibly in different ways)?
 - ➤ If the answer to this question is not "Yes," then stop. Again, the task in this case is designing a new game, not a new scenario.
- ➤ Does the alternative scenario involve essentially the same types of outcomes as those described in this rulebook (i.e., they can be expressed in terms of IPs and RPs)?
 - ➤ If the answer to this question is not "Yes," then stop. Again, the task is designing a new game, not a new scenario.

Assuming one is **not** designing a new game, constructing an alternative session scenario in Hedgemony involves developing or modifying the following game components:

- The Action and Investment Card decks (one deck for each player)
- The player-specific Domestic Event Card decks (for the White Cell)
- > The International Event Card deck (for the White Cell)
- ➤ The session Starting Conditions
- ➤ The session Victory Conditions
- ➤ The freestanding player screens summarizing the Starting and Victory Conditions (one screen per player)
- > The rules in effect for the session (which also may include additional marker chits and cards).

Determining how much work it will be to construct an alternative session scenario involves answering some additional questions. Hedgemony was designed to be adaptable (within the framework of assumptions and tenets that guided its fundamental design), because we modified and tested the game on the fly, adding, removing, and adjusting Action and Event Cards, probabilities, outcomes, and costs either overnight between sessions or, in some cases, during a game session, between turns. An alternative could range from developing completely new card decks to simply removing or editing some cards.

A scenario designer needs to keep in mind that game balance (i.e., the perception that each player's freedom of action and chances for success relative to those of other players are reasonable or can be justified by the scenario context) is highly sensitive to the Starting Conditions of resources, forces, capabilities, and the Victory Conditions; the variety of investments and actions that players may execute and their costs; and the per-turn resource allocation for each player. Relatively small changes to one or more of these factors will significantly upset the balance of play. Unless this is intentional, the learning objectives of a session are likely to suffer.

Player freedom and pace of action (i.e., the number and variety of investments and actions that players can initiate and respond to in a single turn) are highly sensitive to changes in the following:

- The starting and per-turn resource allocation
- The number of cards that Red players are permitted to play per turn and the cost to play each additional card after the first
- The action- or investment-specific costs (i.e., the cost of a certain gray zone, combat, or economic action).

Play balance is also sensitive to changes in the Influence and RP rewards and penalties associated with outcomes of each investment, action, or event and the "probability curves" behind those outcomes.

With these considerations in mind, here are some questions whose answers will inform the amount of work that will likely be necessary to develop a new Hedgemony scenario:

- Does the new scenario involve sets of actions and/or events that are fundamentally different from those provided in the default card decks?
 - ➤ If the answer is "Yes," developing the new scenario will involve work designing new decks and play-testing the scope and balance of actions, outcomes, and costs between actions and between players.
- > Does the new scenario involve expanding the variety of actions and/ or events in the default?
 - If the answer is "Yes," the amount of work will depend on how many "new" actions are needed and whether these are simply variations of existing actions or new ones for which there are not existing examples.
- Does the new scenario involve simply constraining the variety of actions and/or events in the default set?
 - ➤ If the answer is "Yes," the amount of work is trivial—simply remove the desired cards from the deck and play the session with the subset decks.
- Does the new scenario involve essentially the same set of actions and/or events as the default, but the probabilities or outcomes of existing actions may be changed?
 - If the answer is "Yes," then doing this may require less work than designing new decks, but it will still involve play-testing of the balance between actions and between players.

Recall that, earlier, we referred to the Action, Investment, and Event Cards as vignettes in the scenario. An intuitive way to think of these cards, as one ponders whether and how to either modify the existing cards or create new ones for a new scenario, is to think of the cards as potential scenes in an improvisational play (the play being the scenario, and the actors being the players). The challenge is in figuring out what vignettes (scenes) might be needed not only to encourage or induce desired actions or interactions between the players but also to account for how

those actions or interactions would be adjudicated (directed). And in all of this, one must also be mindful that the players get a vote for which vignettes occur and in what order.

There is one last consideration concerning scenario development: Do not underestimate how much work scenario development can be or how unlikely it will be that your scenario will survive first contact with the play-

Publishing a New or Modified Scenario

Publishing a new or modified scenario involves translating answers to questions like those mentioned in the previous section into game content. During the project that led to development of this game, we used Microsoft PowerPoint to develop the initial decks of player cards (Action and Investment Cards), International Event Cards, and Domestic Event Cards, and we continued using this format when we modified them each day during prototyping and play-testing. We defined PowerPoint templates that would allow printing of four, six, or eight cards per 8.5-by-11-inch sheet (depending on the type of card), and used medium-weight cardstock for the materials. We also used PowerPoint to generate and update the player placemats, using an 11-by-17-inch format and ordinary paper materials. A rotary paper cutter was used to cut all materials.

Forces counters and markers (chits) were also developed with PowerPoint, using a table format that permitted printing of many counters per 8.5-by-11-inch sheet. Materials included letter-sized stick-on shipping labels and medium-weight chipboard sheets.

For planning purposes, once our key scenario design decisions had been made using the methods outlined above, it took only a few days to generate the prototype card decks, and we made frequent changes to these decks with one-day turnaround during play-testing (i.e., we incorporated changes based on player feedback and had them ready for the next day's sessions). Several key design decisions made this possible:

- The game is designed to be played at a high level of abstraction.
- The game assumes a significant degree of player expertise.
- The game is designed to be expertly facilitated.
- > We designed adjudication around two widely applicable resolution tables and probability distributions (one for combat, and one for noncombat).
- The player cards merely outline vignettes of actions, investments, or events—we counted on players to provide the remaining context needed to understand the details of what is happening at the time the interactions occurred.
- > We put the resolution instructions and action/event outcomes on the cards.

This is what makes Hedgemony so adaptable to changes in the scenario, as long as the scenario is about the trade space of factors currently modeled in the game, and the boundary conditions defined by the existing rule set are not violated.

Default Scenario Starting and Victory Conditions

The starting RP allocations and the annual RP allocations for the default scenario are detailed in Table A.1. This information is also summarized on the player screens that stand at the head of players' placemats. Use this information to set up a game session for the default scenario.

Note that the specific configuration of resources, forces, critical capabilities, and modernization factors in the default scenario was not meant to reflect a real-world assessment of specific relative capabilities and capacities among participants; it was a game design decision intended to both provide opportunities and force trades among the players. Although adjustments to these Starting Conditions *can* be made without having to change any other game components (such as adding, removing, or changing one or more cards), bear in mind the likely consequences to play balance, outlined earlier in this appendix.

One option that game planners should consider for Starting Conditions is giving one or more Red players an out-of-area base—for example, a PRC base in Djibouti—at the start of the game.

The Victory Conditions (what it takes for each player to "win") for the default scenario are shown in Table A.2.

This information is also summarized on each player's screen (the cardboard stand placed in front of each player's placemat). The meanings of the abbreviated notations are consistent with standard math symbology.

Table A.1. Default Scenario Starting Conditions

DEFAULT SCENARIO STARTING CONDITIONS

Parameter	U.S.	NATO/EU	Russia (RU)	China (PRC)	North Korea (DPRK)	Iran (IR)
Starting force size	20	5	9	15	10	5
National Tech Level	4	4	4	4	1	2
Starting resources	40	10	15	15	5	8
Per-turn resources	30	5	5	4	3	4
Starting Influence Points	50	50	30	40	5	5

Critical Capability Mod Levels	U.S.	NATO/EU	Russia (RU)	China (PRC)	North Korea (DPRK)	Iran (IR)
LRF			4	4	1	2
C4ISR	3	3	3	3		
IAMD/BMD	3	3				
SOF	3					1
Nuclear forces					0	

AOR	U.S.	NATO/EU	Russia (RU)	China (PRC)	North Korea (DPRK)	Iran (IR)
CONUS	14 x Mod3					
INDOPACOM(PRC)	1 x Mod3			5 x Mod1 5 x Mod2 5 x Mod3		
INDOPACOM (DPRK)	2 x Mod3				10 x Mod1	
CENTCOM (Iran)						5 x Mod2
CENTCOM (Afghanistan)	1 x Mod3					
CENTCOM (Iraq)	1 x Mod3					
EUCOM (RU)	1 x Mod3	5 x Mod3	5 x Mod2 4 x Mod3			

In the example shown in Table A.2, the United States "wins" at the end of a game session if it has more IPs than all other players and if North Korea has not "won." China "wins" if it can acquire at least as many IPs as the United States and prevent North Korea from either "winning" or "losing." Notice that the victory conditions are asymmetrical—i.e., it is possible (under the conditions shown in this scenario) for more than one player to win.

Noting that all instances of "win" or "lose" in the preceding paragraphs appear in quotes, we remind the reader of our caveat from Chapter Six that IPs are a highly abstract and generalized metric that provides little more than an artificial quantity by which to track the relative success of player actions and responses and motivate competition between the players. Not only is there no formal or scholarly basis for such a metric, but such tracking is secondary to the purpose for which Hedgemony was created—i.e., to teach U.S. strategy and policy professionals and students of related disciplines about how the trade space of key planning factors in force development, management, posture, and employment could be affected by different defense strategies. Any game session that successfully accomplishes that is successful, regardless of the tally at the end of the session.

Tracking Ground Truth

Actions, investments, and events in Hedgemony sometimes result in outcomes that take place in future turns, are private (known only to the affected player(s) and the White Cell), or are temporary (lasting either some number of turns or until some future condition is met). This can present challenges for both players and the White Cell because the specific circumstances and conditions can be forgotten during the course of subsequent actions, events, and discussion.

Hedgemony provides a worksheet to assist the White Cell in keeping track of these outcomes and when they should either come into effect or end. Figure A.1 shows an example of the Ground Truth Tracking Worksheet, copies of which are provided with the game. We recommend that facilitators use these sheets to record current and projected changes to key player parameters as they occur during play (especially results of actions and events that are designated as "Private" on the cards). There are also spaces for recording brief notes for any other items of interest.

Table A.2. Default Scenario Victory Conditions

DEFAULT SCENARIO VICTORY CONDITIONS

Player	Victory Conditions
U.S.	IPs > IPs of everyone, and DPRK does not win
NATO/EU	IPs > RU IPs, and RU does not win
Russia (RU)	IPs ≥ U.S. IPs –5
China (PRC)	IPs ≥ U.S. IPs –3, and DPRK neither wins nor loses
North Korea (DPRK)	IPs > 15, or U.S. leaves Korean Peninsula Lose if IPs = 0
Iran (IR)	IPs > 20

Ground Truth Tracking Worksheet This worksheet is provided to facilitate the White Cell tracking changes in player resources, national tech levels, and critical capability mod levels and other action or event outcomes (some of which may come into effect on future turns, involve private outcomes, or be temporary or conditional). Turn 1 Turn 2 Turn 3 Turn 4 Turn 5 Turn 6 Turn 7 Turn 8 Turn 9 Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 U.S. Resources changes National Tech Level C4ISR IAMD/BMD SOF Notes Turn 9 Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 NATO/EU Resources changes National Tech Level C4ISR IAMD/BMD Notes Turn 1 Turn 2 Turn 3 Turn 4 Turn 5 Turn 6 Turn 7 Turn 8 Turn 9 Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 Resources changes National Tech Level IRF C4ISR Notes PRC Turn 2 Turn 3 Turn 4 Turn 5 Turn 8 Turn 9 Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 Turn 1 Turn 6 Turn 7 Resources changes National Tech Level LRF C4ISR Notes DPRK Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 Resources changes National Tech Level LRF **Nuclear forces** Notes Turn 1 Turn 2 Turn 3 Turn 4 Turn 5 Turn 6 Turn 7 Turn 8 Turn 9 Turn 10 Turn 11 Turn 12 Turn 13 Turn 14 Turn 15 Resources changes National Tech Level LTF SOF Notes

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defense strategists and policymakers have the perennial challenge of developing capstone documents that can coherently articulate and guide how the U.S. Department of Defense will deliver and maintain combatcredible military forces to deter war and provide national security in alignment with national strategy. These forces must be ready to fight and prevail should deterrence fail against a variety of threats in an evolving and uncertain global security environment, and they must be able to do this with acceptable risks—both in the present against today's threats and in the future against threats that might emerge. Key audiences for these capstone documents include defense planners, programmers, budgeters, managers, analysts, and policymakers who support the development and management of forces that can be postured and employed in alignment with a given defense strategy to accomplish objectives.

Against this backdrop, RAND researchers developed Hedgemony, a wargame designed to teach U.S. defense professionals how different strategies could affect key planning factors in the trade space at the intersection of force development, force management, force posture, and force employment. The game presents players, representing the United States and its key strategic partners and competitors, with a global situation, competing national incentives, constraints, and objectives; a set of military forces with defined capacities and capabilities; and a pool of periodically renewable resources. The players are asked to outline their strategies and are then challenged to make difficult choices by managing the allocation of resources and forces in alignment with their strategies to accomplish their objectives within resource and time constraints.

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