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South Asian Stability Workshop

A Crisis Simulation Exercise

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PASCC
PROJECT ON ADVANCED SYSTEMS AND CONCEPTS
FOR COUNTERING WEAPONS OF MASS DESTRUCTION



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October 2013

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The Naval Postgraduate School Center on Contemporary Conflict is the research wing of the Department of National Security Affairs (NSA) and specializes in the study of international relations, security policy, and regional studies. One of the CCC's programs is the Project on Advanced Systems and Concepts for Countering WMD (PASCC). PASCC operates as a program planning and implementation office, research center, and intellectual clearinghouse for the execution of analysis and future-oriented studies and dialogues for the Defense Threat Reduction Agency.

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ACRONYMS

AA	Anti-aircraft
ALCM	Air-launched cruise missile
AWACS	Airborne Warning and Control System
BMD	Ballistic missile defense
C2	Command and control
IAF	Indian Air Force
IBG	Integrated Battle Group (India)
ICBM	Intercontinental ballistic missile
IRBM	Intermediate-range ballistic missile
LACM	Land-attack cruise missile
LeT	Lashkar-e-Taiba
LoC	Line of Control
MEZ	Maritime Exclusion Zone
MPA	Maritime patrol aircraft
OOB	Order of battle
PAF	Pakistan Air Force
SAM	Surface-to-air missile
SLCM	Submarine-launched cruise missile
SSBN	Nuclear-powered ballistic missile submarine
SSGN	Nuclear-powered guided missile submarine
TNW	Tactical nuclear weapon

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EXECUTIVE SUMMARY

The *South Asian Stability Workshop* was a crisis simulation exercise held 19-22 March in Colombo, Sri Lanka, organized by the Center on Contemporary Conflict at the U.S. Naval Postgraduate School. The simulation convened retired Indian and Pakistani senior military officers and civilian analysts into two teams based on country of origin (India and Pakistan). Participants were confronted with a simulated geopolitical scenario and crisis triggering event, set in the year 2018. The simulation lasted for three “moves” and was moderated by a Control Group consisting primarily of U.S. experts on south Asian security.

The simulation begins with a terrorist attack at a cricket match in Jaipur in November 2018 that kills the Indian defense minister and hundreds of spectators. Evidence traces the attack to Lashkar-e-Taiba (LeT) in Pakistan, and Indian intelligence claims that some elements of the Pakistani government were complicit. Diplomacy fails to defuse tensions; the India team subsequently enforces a “Maritime Exclusion Zone” (MEZ) off the Makran coast and begins air, artillery, and special forces strikes against Pakistani infrastructure and military targets along the Line of Control (LoC) in Kashmir. Specific targets included brigade headquarters, bridges, and alleged terrorist training camps. The Pakistan team was surprised by the intensity of India’s operations and interpreted them as formal acts of war. This reconfirms how non-state actors such as LeT could trigger a major crisis in South Asia at a moment’s notice.

Over three moves spanning nine “in-game” days, what began as a limited war escalated quickly to a full-scale war. Although the India team’s initial intent was to conduct limited, punitive strikes against Pakistan, military necessity on both sides led to extensive mobilizations and horizontal escalation. By the end of the third move, Pakistan was preparing to release warheads to its Strategic Forces Commands, readying nuclear missile launchers for possible battlefield deployment, and conducting nuclear signaling through missile tests and public statements. The exercise concluded at this point when neither side was able to terminate the war on its terms.

Our findings from the simulation exercise lead us to conclude that a limited war in South Asia will escalate rapidly into a full war with a high potential for nuclear exchange. Four key factors observed during the simulation support this conclusion.

First, the enduring rivalry, chronic mistrust, and entrenched threat perceptions between India and Pakistan can encourage excessive military actions during wartime. Even during peacetime, these enduring rivalries heighten bilateral tensions and undermine deterrence stability. By assuming the worst from one another, India and Pakistan can exacerbate their security dilemma and ensnare themselves in a perpetual action-reaction cycle of arms development.

Second, limited war for India is a full-scale war for Pakistan. Pakistan considers India's present and growing conventional force advantage an existential threat and keeps its nuclear option open. If the Indian army and air force strike Pakistani military targets and the navy declares a MEZ against the Pakistani coastline, Pakistan would consider this an act of war. Such a conflict would escalate rapidly. Nevertheless, this report concludes that a conflict might remain limited if Indian aggression is restricted to one-off airstrikes against terrorist targets situated in the disputed territory of Jammu and Kashmir.

Third, India's conventional force advantage creates an incentive to employ its forces maximally on land, sea, and/or air in order to achieve a quick and decisive effect. Doing so runs the risk of an escalation spiral that makes war termination difficult. In its fixation to punish Pakistan, India may also lack a clear and practicable de-escalation strategy, believing that the international community will play this role in its favor.

Fourth, as a limited war escalates horizontally and vertically, Pakistan will face intense pressure to lower its nuclear threshold. As witnessed during the simulation, Pakistan opted to signal nuclear resolve through public statements, missile tests, and threatened field deployment of delivery systems, including such short range systems as the Hatf-IX/*Nasr*. Yet India was undeterred by Pakistani actions in the simulation and indicated that it would attack any deployed *Nasr* units it detected, regardless of whether the payload was nuclear or conventional. The complexity and uncertainty surrounding nuclear deployment in the midst of a conventional war could therefore result in an inadvertent or deliberate escalation culminating in a nuclear exchange.

Although war-games and crisis simulations are not necessarily predictive of real-world outcomes, the *South Asian Stability Workshop* provided significant insight into regional escalation dynamics during a period of crisis. With India and Pakistan embattled in a full-scale war by the end of the third move, with poor outlook for disengagement, the simulation highlights the need for confidence-building measures and a strategic restraint regime that nurtures détente. In the event of a crisis, international intervention and diplomacy must be swift in order to cool tensions and prevent full-scale conflict. Additional simulation exercises may focus on escalation dynamics and nuclear thresholds in the fog of war as well as crisis diplomacy, de-escalation, and war termination strategies.

PROJECT OBJECTIVE

The *South Asian Stability Workshop* was a crisis simulation exercise held in Colombo, Sri Lanka on 19-22 March 2013. Participants were comprised of Indian, Pakistan, and U.S. former military officers, civilians, and academics. The simulation involved dividing the Indian and Pakistani participants into teams based on country of origin and playing three moves within the context of a hypothetical crisis scenario, set in the year 2018. The simulation was not a tactical-level war-game, but rather an operational/strategic-level exercise.

The simulation exercise was designed to reinforce our theoretical understanding of India-Pakistan strategic stability with practical, conceptual clarity. Although Track II dialogues and academic conferences have been useful for developing a robust theoretical understanding of strategic stability, the *South Asian Stability Workshop* provided a laboratory in which these theoretical hypotheses could be explored and stress-tested.

The purpose of the event was to examine crisis decision-making processes and escalation dynamics in South Asia. Given the complex interplay between subconventional, conventional, and nuclear forces on the subcontinent, coupled with military doctrinal evolution, technological maturation, and the lack of a viable strategic restraint regime, the potential for escalation is significant and deserving of analysis.

By convening Indian and Pakistani participants to compose the respective country teams, our intention was to emulate real-world military decision-making dynamics and escalatory pressures as closely as possible. By setting the geopolitical scenario in 2018, our intention was to emulate current strategic dynamics in a relatively proximate timeframe, while simultaneously distancing the participants from present-day political sensitivities that might otherwise constrain their behavior during the simulation. The year 2018 is also a symbolic one, marking the 20th anniversary of the Indian and Pakistani nuclear tests.

In summary, our objective was not to shape Indian and Pakistani policy or encourage war-fighting, but to gain a better understanding of escalatory dynamics under a nuclear overhang. All participants during the workshop interacted in a friendly, frank, and professional manner. We expect the lessons learned from this event will help stakeholders bridge strategic communication gaps, nurture areas of collaboration for durable peace and security, and foster confidence-building between the United States, India, and Pakistan.

SIMULATION MECHANICS

The crisis simulation exercise divided participants into an India team and Pakistan team, based on their country of origin. The country teams were asked to play three “moves” in the wake of a hypothetical crisis triggering event that occurs on 22 November 2018. A Control Group moderated the simulation, provided political guidance and intelligence updates to the country teams, and adjudicated the results of each move. The country teams were instructed to keep their moves at the operational/strategic level, as the simulation was not meant to be a tactical-level war-game. The country teams were also instructed not to share their plans with members of the opposite team until the conclusion of the event.

During each move, the country teams were required to decide their diplomatic and military courses of action and send these plans to the Control Group. After receiving both teams’ plans, the Control Group would convene in private to adjudicate the move. The adjudication process involved studying both teams’ plans and determining the political and military outcomes for that particular move. Based on the Control adjudication, the country teams planned their subsequent move accordingly; this process repeated until the end of the simulation at Move #3.

At the beginning of the simulation, the Control Group presented a hypothetical geopolitical scenario set in the year 2018. The country teams were also provided with an order of battle (OOB) that exhaustively detailed Indian and Pakistani military capabilities in 2018.

After receiving the 2018 geopolitical scenario briefing, the country teams received tailored control briefings in their respective cells, which served as the “political guidance.” The political guidance consisted of goals and instructions designed to constrain the country teams from drafting unrealistic plans. Based on this political guidance, the country teams developed baseline diplomatic/military plans (high and low option) and privately briefed them to the Control Group. The Control Group subsequently convened a global plenary session to announce the crisis triggering event – a terrorist attack in Jaipur, which India has attributed to Lashkar-e-Taiba with alleged Pakistani government complicity. This triggering event set the stage for the commencement of Move #1.

At the beginning of Move #3, teams were instructed to provide their war termination goals, in addition to providing their diplomatic/military courses of action. The simulation concluded with a global plenary session in which the India, Pakistan, and Control teams convened in an open forum to discuss the outcome of Move #3 and lessons learned from the event as a whole.

Event Schedule

Tuesday, 19 March <ul style="list-style-type: none"> ▪ Game mechanics briefing ▪ Geopolitical scenario briefing ▪ Control briefing – political guidance ▪ Team baseline planning sessions 	Wednesday, 20 March <ul style="list-style-type: none"> ▪ Crisis triggering event briefing ▪ Team Move #1 planning sessions
Thursday, 21 March <ul style="list-style-type: none"> ▪ Control adjudication briefing for Move #1 ▪ Team Move #2 planning sessions ▪ Control adjudication briefing for Move #2 ▪ Team Move #3 planning sessions 	Friday, 22 March <ul style="list-style-type: none"> ▪ Control adjudication briefing for move #3 ▪ Global plenary session (Move #3 discussion and lessons learned)

Participant List

India Team	Pakistan Team
Vice Admiral <i>Indian Navy, Ret.</i>	Lieutenant General <i>Pakistan Army, Ret.</i>
Air Vice Marshal <i>Indian Air Force, Ret.</i>	Lieutenant General <i>Pakistan Army, Ret.</i>
Brigadier General <i>Indian Army, Ret.</i>	Brigadier General <i>Pakistan Army, Ret.</i>
Brigadier General <i>Indian Army, Ret.</i>	Air Commodore <i>Pakistan Air Force, Ret.</i>
Civilian Academic <i>Jawaharlal Nehru University</i>	Commodore <i>Pakistan Navy, Ret.</i>
Civilian Academic <i>Regional Centre for Strategic Studies</i>	Civilian Academic <i>Stanford University</i>
Civilian Academic <i>Massachusetts Institute of Technology</i>	Civilian Academic <i>Quaid-i-Azzam University</i>

The Control Group consisted of active and retired U.S. government and military experts on South Asian security matters.

The event was held under the Chatham House rule of non-attribution. Thus, participant names have been withheld from this report.

GEOPOLITICAL SCENARIO

The given geopolitical scenario for the workshop, set in the year 2018, was not dramatically different from today. Primary differences included reduced annual Indian economic growth (down to approximately 6% GDP) and a markedly reduced U.S. footprint in Afghanistan (5,000 troops; mostly special operations forces and air force) that did not rely on Pakistani ground lines of communication for resupply. Territorial disputes between India and Pakistan, namely Kashmir and Sir Creek, remained unresolved.

The geopolitical scenario also highlighted a significant chill in Pakistan-Afghanistan and India-China relations. Pakistan's relations with Afghanistan suffered in early 2018 after the Afghan President made a provocative speech renewing the Durand Line dispute and deployed troops to reinforce the border. Sino-Indian territorial disputes over Arunachal Pradesh and Aksai Chin were also unresolved and remained a source of tension, particularly as China continued its militarization of the Tibetan plateau and infrastructure development with Pakistan (e.g. the Karakoram Highway). Sino-Indian relations further degraded as Chinese dam construction on the upper Brahmaputra River caused water diversion issues for India.

Military Capabilities¹

In 2018, the conventional military asymmetry between Pakistan and India has widened on the land, air, and sea. Accordingly, Pakistan has continued its investment in tactical nuclear weapons (TNW) and delivery systems, such as the 60km Hatf-IX/*Nasr* SRBM.

Both teams in the *South Asian Stability Workshop* were provided with an order of battle (OOB) – an exhaustive inventory of Indian and Pakistani military assets in 2018. The Indian Army was provided with four combat-ready Integrated Battle Groups (IBGs), drawn from the three strike corps but *in situ* with the defensive corps. The IBGs comprised of armor, mechanized infantry, self-propelled artillery, special operations forces, helicopters, and support services, designed for rapid, high-intensity, cross-border punitive operations. The four IBGs were located in strategic points along the international border: Pathankot, Ferozepur, Suratgarh, and Jaisalmer.

Other key Indian military capabilities in 2018 under the given OOB included:

- Increased mobility of mechanized and armored forces. (T-90s)

¹ Estimates for the 2018 OOB were drawn from open sources, including IISS and Jane's.

² Walter C. Ladwig III, "A Cold Start for Hot Wars? The Indian Army's New Limited War Doctrine," *International*

- One infantry division has been improved with Futuristic Infantry Soldier as a System (F-INSAS), a high-tech uniform and equipment system.
- Aviation improved due to attack and transport helicopter procurement (*Apache Longbow, Chinook*).
- Communications enhanced due to improved electronic signals intelligence (ELINT) and airborne warning and control systems (AWACS).
- Increased number of multi-role fixed-wing aircraft.
- Deployment of an additional aircraft carrier (total of 2) has yielded greater blue-water capability for the Indian Navy.
- Nuclear triad complete with one operational nuclear-powered ballistic missile submarine (SSBN *Arihant*).
- Increased long-range strategic nuclear force capability; focused on IRBMs and ICBMs, such as the Agni-V.
- Indigenous BMD point defense capability (additional satellites and 6 interceptor batteries; 3 each in New Delhi and Mumbai).

The Pakistani military also enjoyed enhanced capabilities under the 2018 OOB, but substantial conventional force asymmetry remained in India's favor. In order to mitigate this imbalance, Pakistan had made significant strides in its nuclear capability. The OOB provided Pakistan with some mechanized forces, specialized for rapid mobilization, which reinforced the border garrisons in Gujranwala, Okara, Pano Aqil, and Bahawalpur. These garrisons were specifically intended to hedge against Indian IBGs deployed along the international border.

Key Pakistani military capabilities under the 2018 OOB included:

- Enhanced air defense capability for the Pakistan Army (SAM and AA guns).
- Increased artillery firepower (nuclear-capable).
- Slightly improved intelligence, surveillance, and reconnaissance (ISR) via unmanned aerial vehicles (UAVs), but real-time information capability remains negligible.
- Additional squadrons of JF-17.
- *Agosta* submarine with cruise missile capability has been introduced, but the navy enjoys very little power projection.
- Seven P-3 *Orions* and enhanced AWACS.
- Significant increases in fissile production (plutonium-based) and SRBMs. Hatf-IX/*Nasr* is operational and can deliver TNW to battlefield targets.
- Cruise missile development: Hatf-VIII/*Ra'ad* (ALCM); Hatf-XII/*Babur* (LACM); Hatf-X (SLCM). (Note that a Hatf-X does not exist in 2013, but the Control Group granted the Pakistan team this SLCM capability in the simulation).
- Pakistan asserts centralized command and control (C2) of nuclear forces.

POLITICAL GUIDANCE

The country teams were provided with political guidance to ensure that the diplomatic and military plans each side produced during each move were not unrealistic. For the purposes of the simulation, each team's political guidance was considered a "restricted" document; that is, the India team did not have access to the Pakistan team's political guidance, and vice-versa.

India Political Guidance

The India team was given six key political guidelines to adhere to while drafting their diplomatic/military plans:

- High potential for terrorist attack exists, and if such an attack occurs, it cannot go unanswered militarily due to the political ramifications of inaction.
- The political-military strategy should portray Pakistan as aggressor.
- The military response must be swift and decisive. IBGs exist for this purpose, but must be employed judiciously.
- Military plans should maintain balance of forces on both frontiers, in case of Chinese opportunism.
- Military operations must not cross the Pakistani nuclear threshold or modify the territorial status quo. The military operation must be punitive in action.
- The end result of the military plans should deter Pakistan from the future use of subconventional actors as a tool of state policy.

Pakistan Political Guidance

The Pakistan team was also given five key political guidelines to adhere to while drafting their diplomatic/military plans:

- Repel invading Indian forces and deter India from future acts of aggression.
- Mount a diplomatic offensive to internationalize the crisis, portraying India as the aggressor and Pakistan as the victim of circumstance.
- Military plans should maintain balance of forces on both frontiers, in case of Afghan opportunism.
- Keep the nuclear threshold high, but showcase Pakistan's diverse nuclear capability and signal deterrence.
- Nuclear C2 is centralized. Decentralization of C2, if necessary, must be approved by the National Command Authority (NCA).

CRISIS TRIGGERING EVENT



The trigger event was designed by the Control Group to suddenly escalate diplomatic tensions between India and Pakistan just short of war. The Control Group briefed the trigger event to both country teams, and team planning for Move #1 began immediately thereafter. The trigger event was as follows.

On Thursday, November 22, 2018, a cricket match is held between India and Pakistan at Sawai Mansingh Stadium in Jaipur. Meant as a symbolic gesture of friendship and rapprochement between the two countries, the match is attended by the Indian Prime Minister, several senior cabinet officials, and the Pakistani High Commissioner to India.

At dusk, halfway through the match, six gunmen wearing Indian security force uniforms run onto the field and open fire with automatic weapons. Grenades are thrown into the VIP stands, and the stadium catches fire.

Although the Indian Prime Minister and Pakistani High Commissioner to India escape unharmed, the Indian defense minister is killed, as well as hundreds of spectators in a stampede after the stadium catches fire. Others killed include a Pakistani singer, an Indian actress, and cricketers on both teams.

Four of the six terrorists are killed, and the two that escaped go underground. As a manhunt unfolds in India, the Pakistani government condemns the attack and urges for calm.

No party claims responsibility for the attack. The Pakistani media speculates that right wing Hindu extremists (Vishva Hindu Parishad, or VHP) are responsible, but India blames Lashkar-e-Taiba (LeT), claiming it has intercepted a communication from the two escaped gunmen. Further, Indian intelligence concludes that some Pakistani government officials were complicit in the attack.

GAME SYNOPSIS

The simulation begins with the abovementioned crisis triggering event – a terrorist attack at a cricket match in Jaipur in November 2018 that kills the Indian defense minister and hundreds of spectators. Evidence traces the attack to Lashkar-e-Taiba (LeT) in Pakistan, and Indian intelligence claims that some elements of the Pakistani government were complicit. Diplomacy fails to defuse tensions; the India team subsequently enforces a “Maritime Exclusion Zone” (MEZ) off the Makran coast and begins air, artillery, and special forces strikes against Pakistani infrastructure and military targets along the Line of Control (LoC) in Kashmir. Specific targets included brigade headquarters, bridges, and alleged terrorist training camps. The Pakistan team was surprised by the intensity of India’s operations and interpreted them as formal acts of war. This reconfirms how non-state actors such as LeT could trigger a major crisis in South Asia at a moment’s notice.

Over three moves spanning nine “in-game” days, what began as a limited war escalated quickly to a full-scale war. Although the India team’s initial intent was to conduct limited, punitive strikes against Pakistan, military necessity on both sides led to extensive mobilizations and horizontal escalation. By the end of the third move, Pakistan was preparing to release warheads to its Strategic Forces Commands, readying nuclear missile launchers for possible battlefield deployment, and conducting nuclear signaling through missile tests and public statements. The exercise concluded at this point when neither side was able to terminate the war on its terms.

CONCLUSIONS AND OBSERVATIONS

On Limited War

India's "Cold Start" or "Proactive" operational doctrine envisions a limited, punitive war in response to Pakistani provocation, such as a terrorist attack.² Pakistan's failure to control non-state actors such as the LeT means that a terrorist attack could occur at any time, provoking India to initiate hostilities. India believes it will be able to tightly control escalation and avoid triggering nuclear redlines during such a conflict.³ What begins as a limited war, however, is likely to escalate vertically and horizontally, potentially crossing nuclear thresholds in the process. The interactions and decisions of the country teams during the simulation appear to confirm this hypothesis.

Over three moves spanning nine "in-game" days, the Indian and Pakistani teams escalated quickly to a full-scale war after the 22 November terrorist attack in Jaipur. Although the India team's initial intent was to conduct limited, punitive strikes, military necessity on both sides led to extensive mobilizations and horizontal escalation. By the end of the third move, Pakistan was preparing to release warheads to its Strategic Forces Commands, readying nuclear missile launchers for possible battlefield deployment, and signaling nuclear resolve through missile tests and public statements. The exercise concluded at this point when neither side was able to terminate the war on its terms. The results of the *South Asian Stability Workshop* reveal that a single crisis-triggering event, such as a terrorist attack, can quickly push the region to the brink of a nuclear exchange.

India and Pakistan's adversarial relationship and security-centric thinking are largely derived from mutual non-assurance. Pakistan cannot assure India there will not be a subconventional attack; India cannot assure Pakistan that it will not retaliate conventionally to a subconventional attack; and Pakistan cannot assure India that conventional war will not cross Pakistan's nuclear threshold.

At any rate, the notion that a limited war can be fought and won in South Asia, and concluded on one side's terms, is dubious and has dangerous implications. Four key factors, observed in action during the simulation exercise, support this assertion.

² Walter C. Ladwig III, "A Cold Start for Hot Wars? The Indian Army's New Limited War Doctrine," *International Security* 32, No. 3 (Winter 2007/08): 158-59.

³ Ibid.

Enduring Rivalry

First, the enduring rivalry, chronic mistrust, and charged emotions between India and Pakistan can encourage excessive military actions during wartime. The India team, for example, began Move #1 with a Maritime Exclusion Zone (MEZ) against the entire Pakistani coastline with a combined fleet and heavy punitive air-land strikes on Pakistani troop locations across the LoC. The India team highlighted the need to inflict “cumulative retribution” on Pakistan in return for decades of provocation. At the same time, however, the India team emphasized that it had no designs to change the territorial status quo with Pakistan and that its military objectives were limited and punitive.

The Pakistan team dismissed India’s declaration of limited intent. Fearing a ground invasion, Pakistan launched a preemptive attack in Move #2 across the international border against an Indian formation, although India had exclusively been focusing its offensive ground and air operations across the LoC. Cognitive biases exerted upward escalatory pressure during our simulation and could have a similar real-world effect.

Even during peacetime, enduring rivalries heighten bilateral tensions and undermine deterrence stability. By assuming the worst from one another, India and Pakistan exacerbate their security dilemma and ensnare themselves in a perpetual action-reaction cycle of arms development.

Military Necessity

Second, limited war for India is a full-scale, existential war for Pakistan, given India’s present and growing conventional force advantage. The Pakistan team, for example, argued during Move #1 that it was militarily necessary to prepare its forces for the worst case of Indian aggression. Indeed, the India team struck Pakistani military targets in Move #1, which was perceived as an act of war and escalated accordingly. Thus the geography, target set, and intensity of an Indian military operation shapes Pakistan’s military response and nuclear posture. This report concludes that if India had limited its aggression to one-off airstrikes against terrorist targets in the disputed territory of Jammu and Kashmir – as opposed to targeting the Pakistani military – the crisis might have remained limited.

Escalation Control is Illusive

Third, the concept of limited war assumes a significant degree of escalation control, which is difficult to exert during armed conflict. The India team, for example, was intent on extracting concessions from the Pakistan team from the outset of hostilities (e.g. the extradition of LeT leadership to New Delhi for trial). Extracting concessions, however,

relies on coercion, which exacerbates escalation rather than limiting it. In its fixation to punish Pakistan, India may also lack a clear and practicable war de-escalation strategy, believing that the international community will play this role in its favor.

In addition, India's conventional force advantage creates a dilemma regarding force employment. The temptation to employ forces maximally on land, sea, and/or air in order to achieve a quick and decisive effect is very high, but doing so creates an escalation spiral that makes war termination difficult. The India team grappled with this dilemma during the simulation but nevertheless launched a punitive military operation in Move #1.

Another blow to escalation control is the pervasive yet dubious belief that air and maritime actions are inherently less escalatory than land operations. India maintains a diverse suite of air and maritime response options, which can rapidly escalate a bilateral crisis and potentially violate nuclear redlines. As the simulation demonstrated, the India team's airstrikes against Pakistan military targets and the enforcement of the MEZ off the Makran coast were deemed by the Pakistan team as acts of war, whereas the India team deemed these actions as restrained, justified, and short of war. As Pakistan seeks to enhance its strategic depth by strengthening its navy and developing a sea-based nuclear deterrent, the implications of escalation in the maritime realm in South Asia become increasingly dire.

Low Nuclear Threshold

Fourth, as a limited war escalates horizontally and vertically, Pakistan will face intense pressure to lower the nuclear threshold. Pakistan may opt to signal nuclear resolve through public statements, missile tests, and by threatening field deployment of delivery systems, such as the Hatf-IX/*Nasr* – all of which occurred during the simulation. Lowering the nuclear threshold and simultaneously signaling deterrence can result in inadvertent or deliberate escalation culminating in a nuclear exchange.

Initial Escalation Dynamics, Post-Trigger Event

The Pakistan team suggested that even though it had developed distinct “low” and “high” option baseline military plans at the outset of the simulation (just as the India team had also been instructed to do), the uncertainty regarding the Indian response meant that Pakistan had no choice but to prepare itself to meet an Indian maximal option.

In the geopolitical scenario provided at the beginning of the simulation (set in the year 2018), there was a 10-year duration in which no major Pakistan-traced terror attacks took place against India. Nevertheless, the India team reacted to the trigger event (the November 2018 terrorist attack in Jaipur) with a significant punitive military operation

against Pakistan during Move #1, including a MEZ and joint strikes against Pakistani brigade HQs across the LoC. For the Pakistan team, this amounted to a formal act of war.

The Pakistan team had expected India to retaliate, perhaps against the terrorist source of the Jaipur attack, but they felt that the India team went too far by striking against Pakistani soldiers, who had nothing to do with the Jaipur incident. Attacking the military indicated that India held the Pakistani state responsible for the Jaipur attack.

The Pakistan team believed that India's targeting of the Pakistani military during Move #1 was both inappropriate and disproportionate given the 10-year duration without terrorist incident. The India team, on the other hand, cited the need to inflict "cumulative retribution," pointing out that India's patience with Pakistan was thin given its 25 years of support for jihadist elements. The India team also pointed out an Indian intelligence report during the simulation indicated that elements of the Pakistani government had knowledge of the impending attack in Jaipur; to the India team, this meant that the Jaipur attack was sponsored by the Pakistani state, which provided India's *casus belli* for attacking Pakistani brigade HQs in Kashmir. In short, the India team argued that the Jaipur attack was a Pakistani act of war, whereas the Pakistan team portrayed India's disproportionate aggression during Move #1 as an act of war.

The India team provided additional explanations for attacking Pakistani military targets instead of LeT strongholds: (1) LeT targets are difficult to discern, (2) destroying them would have negligible deleterious impact on the LeT, and (3) attacking LeT targets alone would not deter the Pakistan government from supporting terrorist organizations in the future. In other words, terrorism is the symptom, and the Pakistani military was deemed the source of the problem.

The Pakistan team argued that even if some elements or individuals in the Pakistani government had supposed prior knowledge of the terrorist attack in Jaipur, this does not equate to Pakistan government complicity in the attack itself. Pakistani government officials might have easily dismissed threats and indicators of an impending terrorist attack as mere "chatter." In the words of one Pakistan team participant, "[Government] negligence is not the same as complicity."

Perception and Escalation

The intensity of India's Move #1 plans surprised the Pakistan team, which did not expect India to implement a Maritime Exclusion Zone or attack Pakistani military targets. Although the India team was actually employing a version of its "low" option during Move #1, the Pakistan team perceived it to be so disproportionate that India must be employing

its maximal option. As one participant concluded after the simulation, the India team's low and high options were essentially a high and high prime.

It is unlikely that escalation could have been controlled if the India team had more effectively signaled that it was employing its low option. Regardless of what India signaled, the Pakistan team's *perception* was that India's actions were disproportionate and maximal. Furthermore, the enduring rivalry and history of mistrust on the subcontinent would cause Pakistan to doubt the veracity of any Indian claims, as occurred frequently during the simulation. Finally, an employed low-end option can easily graduate and escalate into a high option depending on how the conflict itself progresses in both the military and diplomatic realms.

Diplomatic Strategy and Military Posture

Beginning with Move #1, the India and Pakistan teams' diplomatic strategy was to internationalize the crisis. The Pakistanis hoped that signaling nuclear resolve and capabilities would induce international intervention to cool the crisis. The Pakistan team also sought to undermine India's *casus belli* by publicly pressing the India team to provide evidence of LeT and Pakistani government complicity in the Jaipur terrorist attack. Conversely, the India team's diplomatic blitz was aimed at discouraging international intervention, in order to allow enough time to inflict punitive measures against Pakistan. In its public statements, the India team showed a tendency to emulate language used by the United States, ostensibly to enhance the legitimacy of their actions. For instance, the India team characterized its military offensive as "India's war on terror."

One of the Pakistan team's dilemmas during the simulation was trying to reconcile (1) the need to appear as a "victim" of Indian aggression, with (2) the desire to initiate a proper counterattack across the LoC. Playing the victim and adopting a defensive military posture complemented Pakistan's diplomatic effort to elicit international sympathy.

Ground Operations

The term "Cold Start" appeared only once during the simulation: the Pakistan team's high-option baseline plans. Unsurprisingly, the India team did not mention Cold Start, and they did not implement it as the doctrine is currently understood. The India team did emphasize, however, that in any ground operation across the international border into Pakistan, the incursion would be limited but not uniform; in other words, the incursion in some sectors of the international border would be deeper than in others.

The India team was not concerned that China might launch an opportunistic attack during the simulation; at the same time, the India team maintained their eastern forces *in situ* instead of redeploying them to the western front. By maintaining a strategic balance of forces across the country, the India team was confident that Chinese military intervention was unlikely and any incursion could be repelled.

Similarly, the Pakistan team was unconcerned with Afghan military adventurism during the simulation. Military necessity in the conflict with India forced Pakistan to withdraw formations from the western border and deploy them along the LoC and international border. Defense of the western border was left up to the Frontier Corps and tribal lashkars. The Pakistan team suggested that if the Afghan National Army (ANA) did cross the border and captured some posts, Pakistan would retake them after the cessation of hostilities with India.⁴

Naval Operations

The India team ordered its Navy to enforce a MEZ during Move #1, which the Pakistan team interpreted as an act of war equivalent to a blockade. The MEZ would involve boarding and seizing operations off the Makran coast of all ships bound for Pakistani harbors, inflicting significant economic impact. Additionally, the India team opted to use a combined eastern and western fleet to enforce the MEZ. In the real world, staging a combined fleet would require significant naval movements that would be picked up by Pakistani intelligence, sending a very strong escalatory signal.

Securely enforcing the MEZ obligated India to counter Pakistani maritime patrol aircraft (MPA) during the simulation, which created substantial escalatory risk. Pakistani MPA assets, such as the P-3 *Orion*, are able to locate hostile surface and sub-surface ships and transmit their coordinates to friendly units, including submarines. Unchallenged MPA would therefore allow Pakistan to quickly target Indian vessels and help freighters evade interdiction. Accordingly, India actively targeted MPA and shot down a P-3 during Move #1.

Pakistan's deployment of a conventional-armed SSGN on patrol within the MEZ during Move #2 highlights the escalatory risks associated with dual-use weapon systems. Dual-use refers to weapons systems that can be armed with either conventional or nuclear payloads, such as cruise missiles. Dual-use systems increase battlefield uncertainty and

⁴ The Control Team set up India-China and Afghanistan-Pakistan tensions at the outset of the simulation, but did not escalate them in order to keep the focus on the interactions of India and Pakistan.

can promote rapid, unintended escalation on land, sea, or air.⁵ If Pakistan's SSGN had been nuclear-armed and destroyed by an Indian surface ship conducting anti-submarine warfare, escalation could be rapid and disastrous.

Air Force Operations

The India team stressed that it enjoys air dominance over Pakistan by default, thanks to the wide qualitative and quantitative asymmetry that exists today and is projected to deepen by 2018. The India team's air force plan during the simulation involved luring the Pakistan Air Force (PAF) into the skies where they could be destroyed by the Indian Air Force (IAF). The Pakistan team, cognizant of the threat posed by the IAF and Indian air defense, adopted a defensive posture for the PAF and indicated that PAF assets would not be "frittered away" on deep strategic conventional strikes within Indian territory.

Air dominance implies that India would need to neutralize Pakistani air bases not just across the LoC, but throughout Pakistan proper. So long as Pakistan retains the runway infrastructure and air-breathing assets to conduct counter-air operations, Indian air dominance will be constantly challenged during a conflict.

Throughout the simulation, the Pakistan team utilized its air force in a primarily defensive manner, eschewing deep strategic strikes against Indian targets in favor of providing support to Pakistani land and naval operations. The Pakistan team's objectives were to preserve its air force and minimize undue escalation. It is difficult, however, to limit vertical and spatial escalation in the air, given the high velocities and absence of geographic obstacles. As one participant pointed out, there are no hills in the sky.

Nuclear Issues

During a 2002 interview, Khalid Kidwai, Director-General of Pakistan's Strategic Plans Division (SPD), revealed four factors governing Pakistan's use of nuclear weapons. They were (1) spatial ingress by the adversary, (2) significant levels of destruction, (3) economic strangulation, and (4) domestic destabilization.⁶

Although the Pakistan team made a concerted effort to signal its nuclear capability and credibility at all stages of the simulation (including missile tests and public statements), the

⁵ Iskander Rehman, "Drowning Stability: The Perils of Naval Nuclearization and Brinksmanship in the Indian Ocean," *Naval War College Review* 65, no. 4 (Fall 2012): 77-8.

⁶ Feroz Khan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford: Stanford University Press, 2012), 351-52.

India team was not deterred from counter-attacking across the international border during Move #3 or enforcing the MEZ. Even readying TNW delivery systems such as *Nasr* for potential deployment during Move #2 failed to limit Indian aggression. Although the Pakistan team believed that actual deployment of its tactical nuclear forces might help bring about international intervention that would defuse hostilities, Pakistan did not exercise this option because doing so risked significant and sudden escalation with India.

Regardless, by Move #3, nuclear tensions were high, and both India and Pakistan had operationalized their triads. In an effort to obtain an immediate ceasefire, Pakistan offered nuclear alert status de-escalation as a bargaining chip. India's war termination goals, however, were so expansive that it was unwilling to entertain Pakistani ceasefire overtures. This report concludes that if the simulation had proceeded to a Move #4, Pakistan would have faced pressure to continue escalating its nuclear posture. The possible employment of tactical nuclear weapons in such a situation cannot be ruled out.

Throughout the simulation, the India team appeared unfazed by Pakistan's nuclear signaling and threats to deploy the *Nasr*. The retired military officers on the India team indicated that all battlefield-deployed Pakistani missile launchers will be targeted during an armed conflict irrespective of whether they are nuclear or conventional. Moreover, the retired military officers on the India team were unanimous that the detonation of a single Pakistani TNW – even in self-defense on Pakistani territory – would invite “massive retaliation” from India. One Pakistani participant suggested that massive retaliation was a disproportionate response to a defensive tactical nuclear blast.

Both sides signaled they were willing and resilient enough to endure a nuclear exchange. The Pakistan team warned it would harden its targets and “fight through”; the India team expressed the same.

CAVEATS AND LIMITATIONS

The participant makeup of each country team (80% military and 20% academic) impacted the discourse at the event. There were no regional diplomats or policy officials in attendance. Participants were asked to focus their moves at the strategic and operational levels rather than provide detailed tactical plans.

Although none of the players on the teams were active duty or sitting government officials, they all were playing within the context of the extant deterrence situation between India and Pakistan. Therefore it is likely that some actions taken and statements made during the game play were meant not only in game context but as signals in the broader strategic context between Pakistan and India. These signals may have been meant for U.S. observers present as much as for players from the other team. When drawing conclusions from the *South Asian Stability Workshop*, it is important to keep this in mind.

Great care should be taken to distinguish between lessons learned from simulations and lessons learned from the real world. Simulation lessons should be looked at for what they are – lessons from an artificial environment with a number of significant constraints: at the very least, one set of players working through a single scenario one time. That said, lessons from simulations are often the only lessons one has to draw upon when addressing issues related to war and escalation dynamics. Real wars, thankfully, are relatively few and far between, and examination of their lessons is often fraught with its own complications and distortions.