



Introduction to KTT's Popular Science Wargame

A Locally-Developed Taiwan Wargame
on Cross-Strait Conflict

KTT's 科普兵推
KTT's Popular Science
Wargame

Since July 2024, the Popular Science Wargame has been introduced across multiple high schools and universities in Taiwan, and has gradually gained traction among broader society.

In August 2025, KTT's Popular Science Wargame: Cross-Strait Conflict released its 2.0 version, incorporating richer elements and modules to continue facilitating wargame activities for diverse audiences.

KTT's Popular Science Wargame was developed in consultation with retired officials and experts from across Taiwan and is operated on a non-profit basis by a group of like-minded friends.



Development Overview



Primary Purposes

The purpose of the KTT's Popular Science Wargame system is to highlight the significance of the wargaming process rather than to pursue the implications of a final outcome.

The design of the wargame is a simplified version of real-world conditions, aiming to complete 10 to 20 moves within roughly a two-hour session.

On this basis, the Popular Science Wargame serves two primary purposes:

- Public Education
- Scenario Testing

In terms of public education, the KTT's Popular Science Wargame allows students and the general public to directly participate in a 3–4 hour session simulating a 1–2 week crisis scenario. Through this experience, participants gain a deeper understanding of Taiwan Strait military dynamics, government crisis decision-making logic, and the latest major cross-strait developments. The wargame is also designed to spark participants' curiosity and interest in these issues.

Unlike board games, each wargame session concludes with a 30–60 minute After Action Review. During this review, researchers in relevant fields explain the potential real-world implications of the simulated scenarios and guide participants through interactive discussions.





Scenario Testing

In terms of Scenario Testing, the KTT's Popular Science Wargame can incorporate new systems and units as needed, adjust the parameters of specific systems and units, or modify the definition of each move. The baseline design features a 14-move simulation (with each move representing one day), lasting about two hours. With proper time management, three to four sessions can be conducted in a single day, enabling comparisons of different scenarios, force allocations, and other factors that influence the course of events.

What the Popular Science Wargame emphasizes is scenario testing through the process of simulation, rather than simply the end result. For example, one may compare how varying allocations of Volcano mine-laying systems and HIMARS multiple rocket systems affect the PLA's efficiency in conducting amphibious landings and advancing inland, rather than merely observing the overall outcome of victory or defeat.

Modularity

To adapt to different objectives and evolving real-world developments, all design details of the wargame are modular. Elements can be added, replaced, or adjusted as needed.

Spatiotemporal Simulation

For greater realism, each move is time-limited to simulate crisis decision-making, and the map's terrain and infrastructure are based on actual conditions.

Closed Rules

To ensure efficiency, all actions during the wargame must strictly follow established rules; actions not explicitly defined are not permitted.

Participant-Driven

To preserve the experimental nature of the simulation, aside from pre-designed events, the evolution of the conflict remains open-ended and is determined by participants' decisions.

Design Concept



Basic Wargame Design and Scenario Settings

**Public
Education**

Defense in depth
Behind-the-lines sabotage
Securing U.S. assistance
Wartime civil governance

**Public Education
on Taiwan Strait
Conflict**

**Government Crisis
Decision-Making
Scenarios**

Strategic planning
Delegation of authority
Interagency coordination
Real-time response

**Recent Major-
Issue Simulations**

Urban operations
Fifth Column
Social resilience
TSMC's relocation to the U.S.

**Scenario
Testing**

Wargame Objectives

These are the three main objectives; specific sessions may emphasize other goals as needed.



Scenario Elements

Starting Phase

e.g., gray-zone or wartime scenario

End Conditions

e.g., will to fight or negotiated settlement

Fog of War

e.g., anti-submarine operations, PLA ground force deployments

Preemptive Strikes

e.g., prohibition on preemptive strikes or freedom to strike upon target acquisition

Force Disparity

e.g., identical combat strength for comparable units on both sides, or specific disparities in combat power

Intelligence Deployment

e.g., whether intelligence assets can be dispatched to the Chinese mainland



These represent the main scenario elements, with other detailed elements available as well.

Participants take on the roles of officials within different branches of Taiwan's government, each responsible for distinct tasks:

- President and National Security Council: resource allocation, bureaucratic coordination
- Ministry of National Defense / General Staff Headquarters: strategic deployment, joint operations
- Intelligence Bureau: behind-the-lines infiltration, cognitive operations
- Ministry of Foreign Affairs: securing external support, mobilizing resources
- Executive Yuan: maintaining social stability, countering the Fifth Column



This is the basic setup, which can be modified with additional systems or officials as needed.

Bureaucratic System and Officials

Simulation Settings



Turn Settings

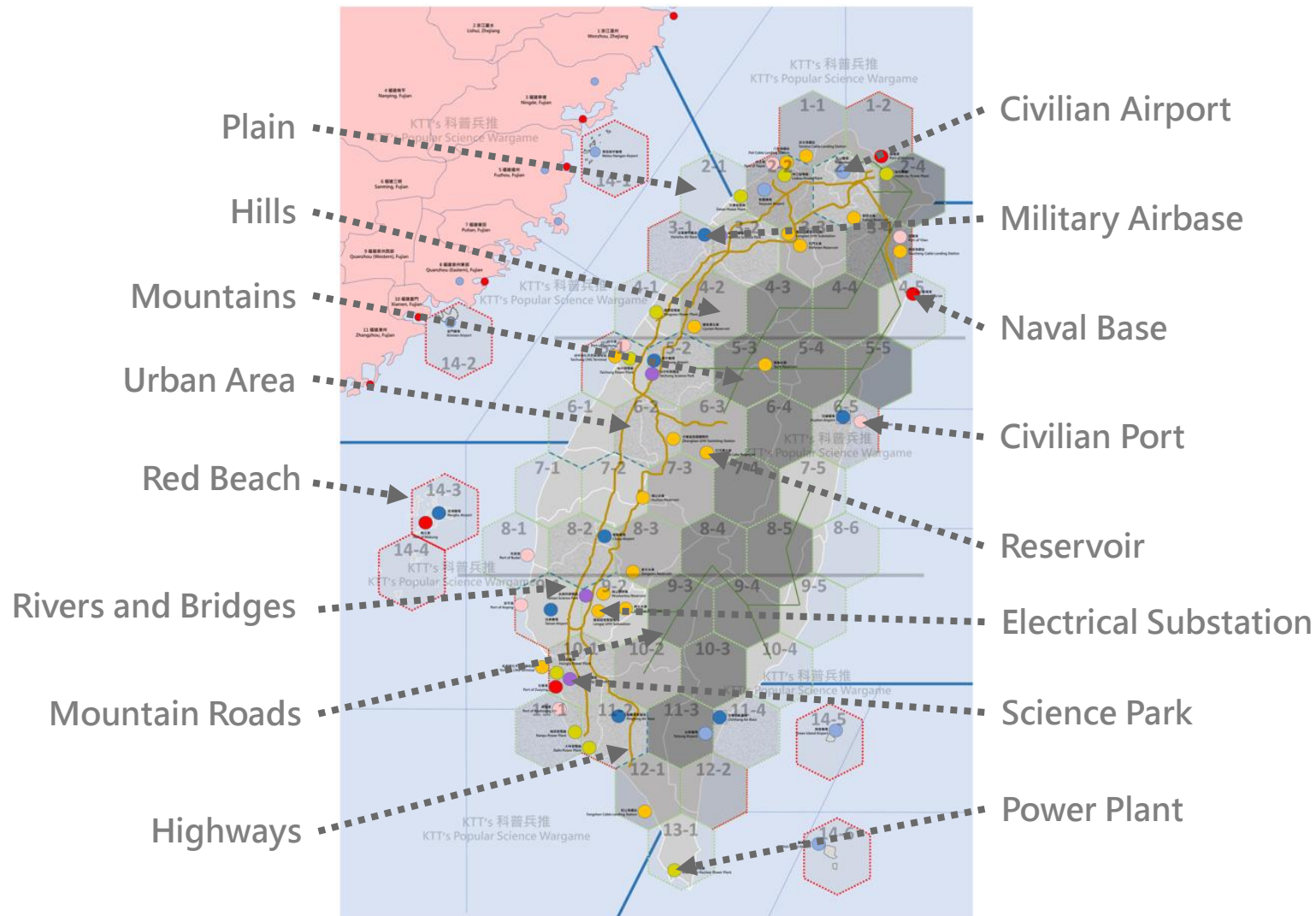
- Pace: 5–7 turns per hour.
- Time scale: 1 turn = 1 day, divided into three phases:
 - Phase 1 — Previous-turn Brief & Status Check: summarize the last turn's situation and verify the status/effects of ongoing events.
 - Phase 2 — Taiwan Side (4–6 minutes): Taiwan-side players carry out deployments and attacks according to the rules. Once time expires, no further actions are permitted.
 - Phase 3 — China Side (2–4 minutes): China-side players carry out deployments and attacks according to the rules. Once time expires, no further actions are permitted.

Decision-making Settings

- The Taiwan-side decision-making mechanism and policy process may be participant-determined or predefined.
- Participants may simultaneously hold multiple roles, or multiple participants may jointly fill one or more roles.
- Example: Three participants jointly act as the Chief of the General Staff and theater/command commanders; they collaboratively discuss and decide unit movements and whether to engage the enemy.

These are the main simulation settings and can be expanded or reduced as needed.

- Each land region is approximately 40 kilometers wide.
- Solid blue lines indicate maritime chart area boundaries; dashed blue lines indicate subsector boundaries.
- The effects of terrain types, landforms, and infrastructure are configurable.



Ground Operations Map

This is the main map, accompanied by additional supplementary maps and tables.



Maritime Operations Map

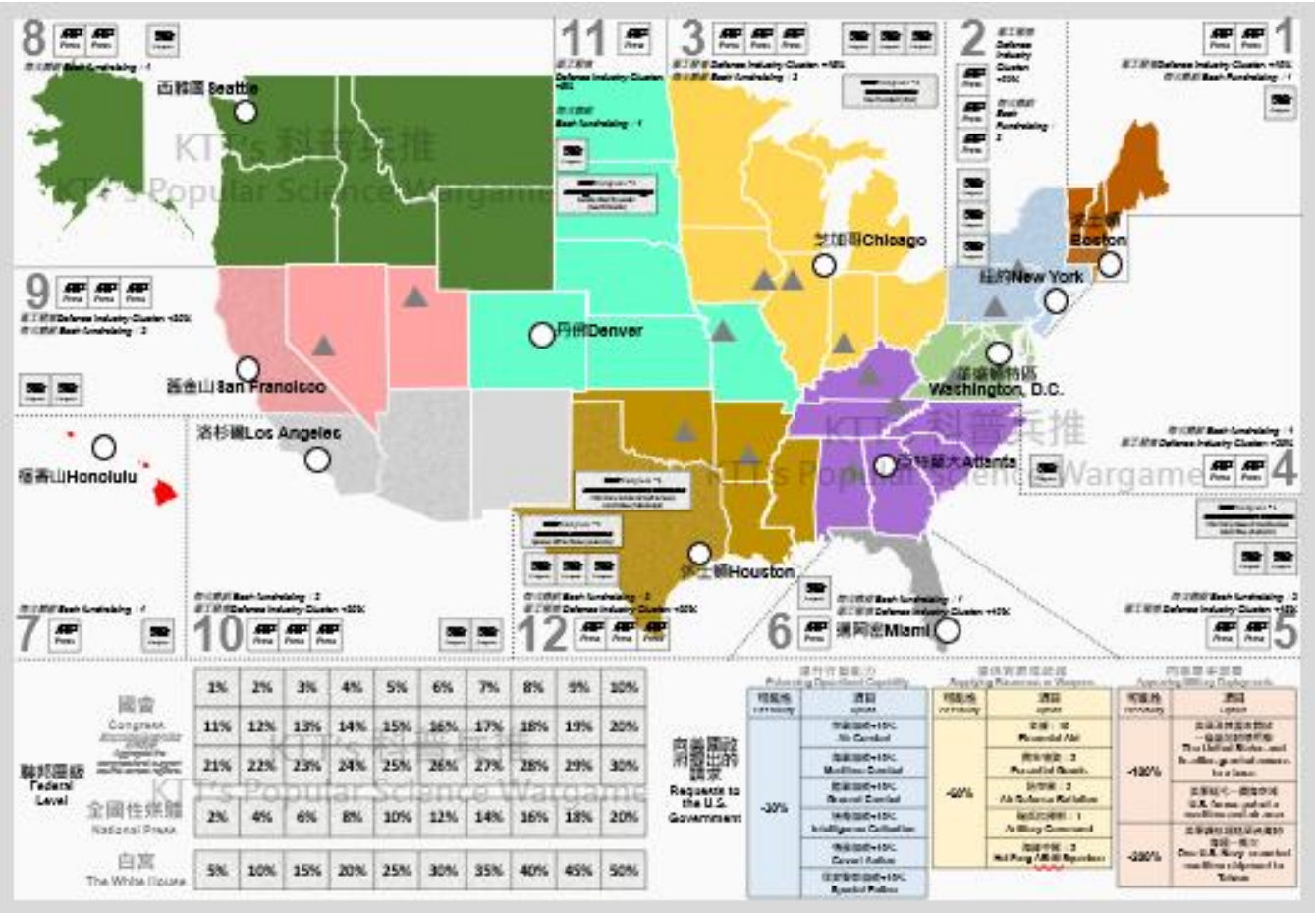


Each maritime region is approximately 400 kilometers wide.



This is the primary map; additional supplementary maps and tables are also available.

Divided into federal- and state-level diplomatic actions, this map includes engagement with the media, Congress, civil society, and the White House. Players may request operational assistance, military supplies, or fundraising support from the United States.



Diplomatic Map

This is the U.S. diplomatic map; additional maps for other countries are also available.



Unit Roster

Blue counters represent Taiwan, red counters represent China, and green counters represent other countries.

 後備旅 Reserve Brigade 陸G O/D 2/2/0	 陸航旅 Army Aviation Brigade 陸G O/D 5/8/0	 兩棲合成旅 Amphibious Combined Arms Brigade 陸G O/D 5/4/0	 陸航旅 Army Aviation Brigade 陸G O/D 5/8/0	 醫療營 Medical Battalion 陸G O/D 0/4/0	 情蒐組 Intelligence Collection Team 民C O/D 7/2/0
 聯兵旅 Combined Arms Brigade 陸G O/D 5/4/0	 砲兵指揮部 Artillery Command 陸G O/D 8/4/7	 合成旅 Combined Arms Brigade 陸G O/D 5/4/0	 遠程火箭砲兵旅 Rocket Artillery Brigade 陸G O/D 8/4/7	 信息支援部隊 Information Support Force 陸G O/D 0/3/2	 特務組 Covert Action Team 民C O/D 7/2/0
 機動阻絕隊 Mobile Interdiction Team 陸G O/D 0/4/0	 工兵群 Engineering Group 陸G O/D 0/3/0	 工程兵旅 Engineer Brigade 陸G O/D 0/3/0	 聯動保障部隊 Joint Logistics Support Force 陸G O/D 0/3/1	 特種駁船 Landing Barge 海M O/D 0/1/0	 認知作戰組 Cognitive Operations Team 民C O/D 7/2/0
 海軍陸戰旅 Marine Brigade 陸G O/D 6/5/0	 驅逐艦 Destroyer 海M 空A O/D 5/2/1	 驅逐艦 Destroyer 海M 空A O/D 5/2/1	 護衛艦 Frigate 海M 空A O/D 2/2/1	 兩棲攻擊艦 Amphibious Assault Ship 海M O/D 0/2/0	 保安警察 Special Police Corps 民C O/D 1/2/0
 巡防艦 Frigate 海M 空A O/D 2/2/1	 巡邏艦 Corvette 空A O/D 2/2/1	 柴油潛艦 Diesel Submarine 海M O/D 5/1/0 空A O/D 2/1/0	 核動力潛艦 Nuclear Submarine 海M O/D 5/1/0 空A O/D 4/1/1	 航空母艦 Aircraft Carrier 海M O/D 0/2/0	 醫療救護隊 Medical Assistance Team 民C O/D 0/2/0
 柴油潛艦 Diesel Submarine 海M O/D 5/1/0 空A O/D 2/1/0	 海鋒中隊 Hai Feng ASBM Squadron 海M O/D 2/4/1	 海軍陸戰旅 Marine Brigade 陸G O/D 3/5/0	 核動力潛艦 Nuclear Submarine 海M O/D 5/1/0 空A O/D 4/1/1	 航空母艦 Aircraft Carrier 海M O/D 0/2/0	 基建搶修隊 Infrastructure Rapid Repair Team 民C O/D 0/2/0
 柴油潛艦 Diesel Submarine 海M O/D 5/1/0 空A O/D 2/1/0	 戰機隊 Tactical Fighter Group 空A O/D 5/7/2	 戰機隊 Tactical Fighter Group 空A O/D 5/7/2	 戰機隊 Tactical Fighter Group 空A O/D 5/7/2	 驅逐艦 Destroyer 海M 空A O/D 5/2/1	 民生必需品 配給站 Essential Goods Distribution Station 民C O/D 0/2/0
 防空營 Air Defense Battalion 陸G O/D 7/4/3	 飛彈旅 Missile Brigade 陸G O/D 15/-/10 陸G O/D 7/4/10	 飛彈旅 Missile Brigade 陸G O/D 15/-/10 陸G O/D 7/4/10	 空降兵旅 Airborne Brigade 陸G O/D 3/5/0	 防空營 Air Defense Battalion 陸G O/D 7/4/3	 第五縱隊 Fifth Column 民C O/D 0.5/1/0

These are the basic units; additional units may be added or removed depending on the needs of the wargame.



Contact for Collaboration:
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Latest Updates: IG



More Info: Website

Collaboration Options

Chinese-English
Bilingual

Adaptable
Scenarios

Adjustable
Systems & Units

Handbook &
Briefing Materials