OPERATION BRONZE ACHILLES

JOINT INTELLIGENCE PREPARATION OF THE OPERATIONAL ENVIRONMENT (JIPOE)

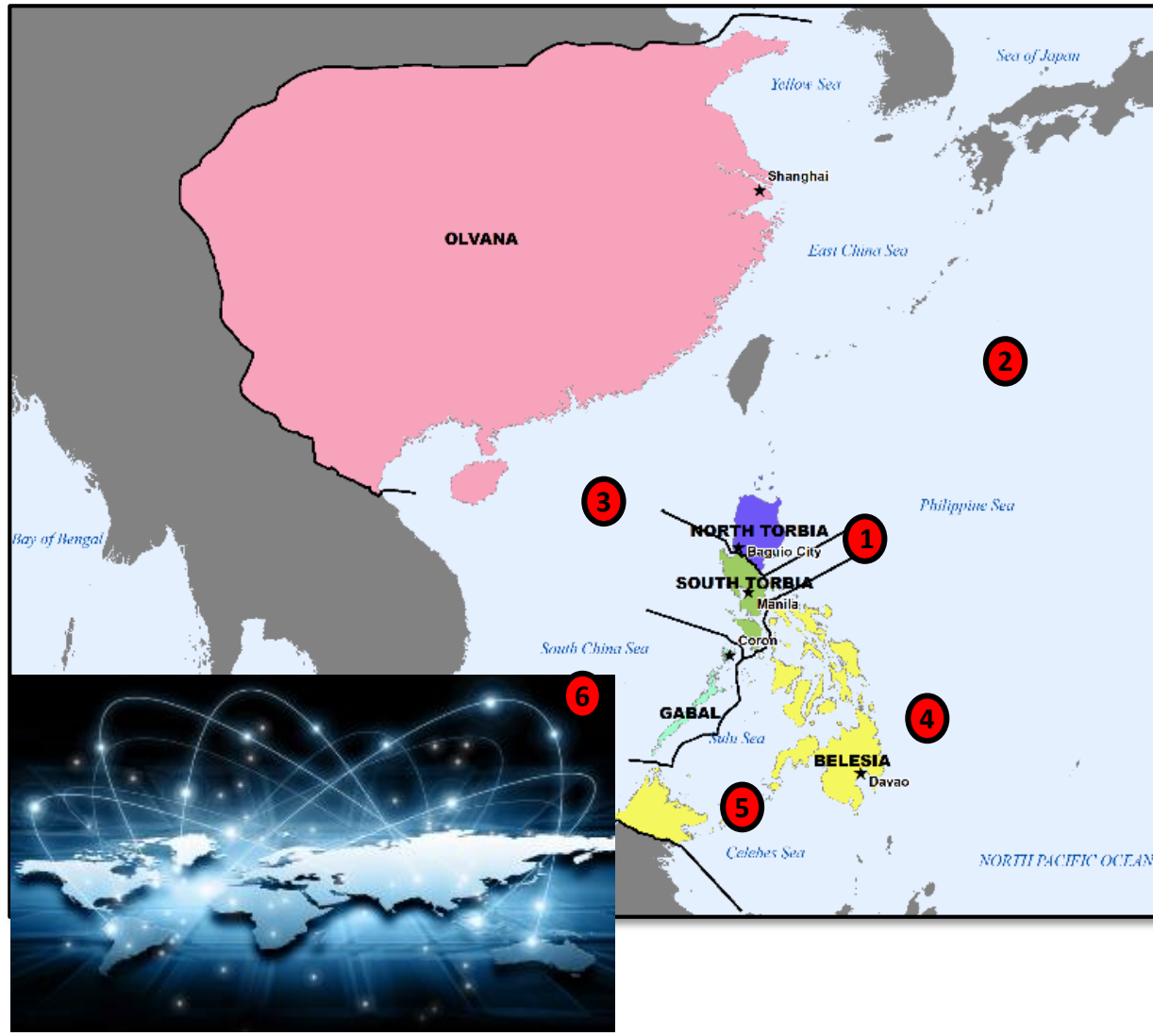
Scope

1. Define the operational environment
2. Describe operational environment effects
3. Evaluate the threat
4. Determine threat courses of action

1. Defining the Operational Environment

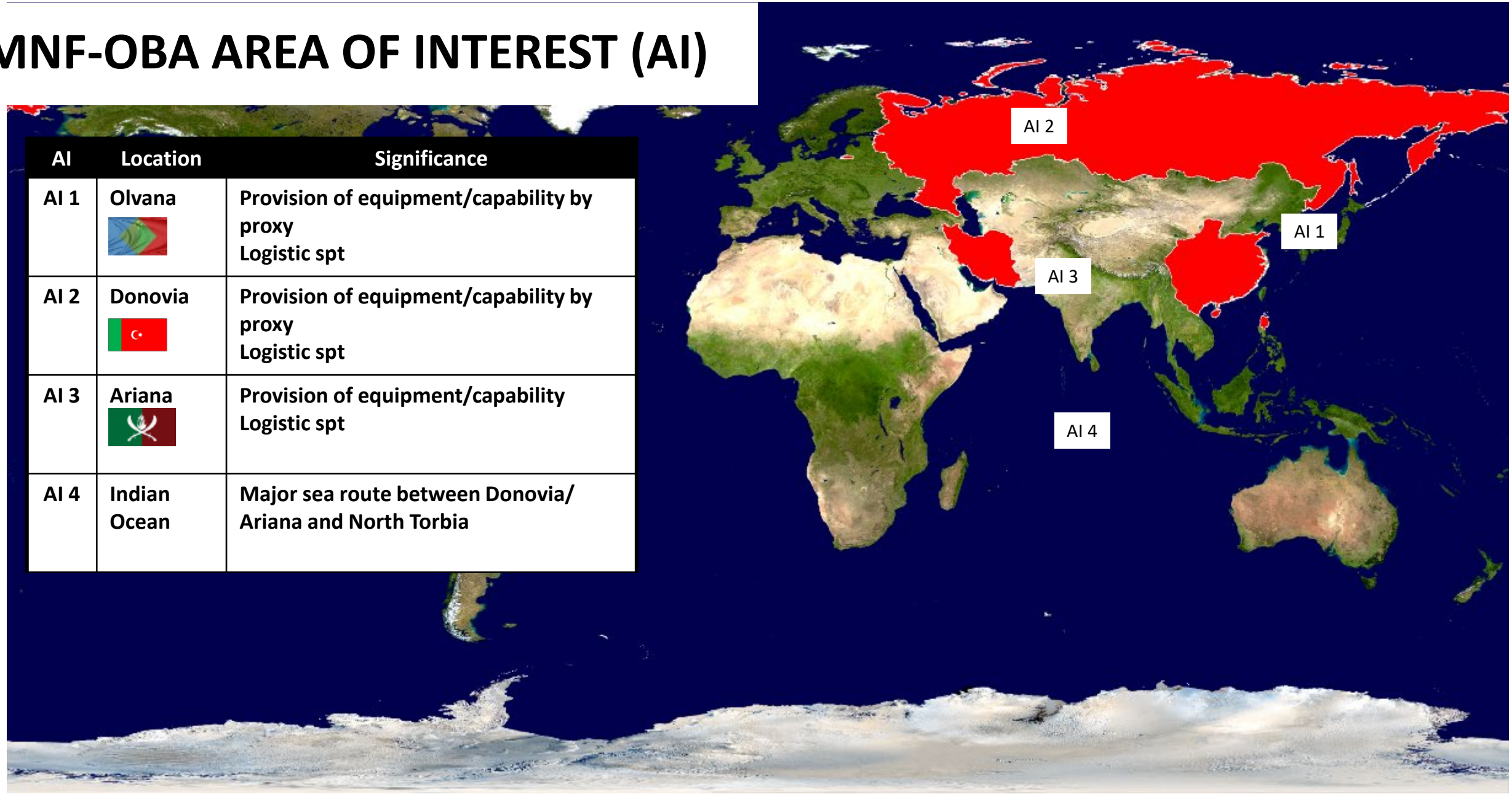
MNF-OBA AREA OF OPERATIONS (AO)

No	Location	Comments
1	The island of Luzon containing North and South Torbia, and their air space.	Restrictions apply
2	The Philippine Sea, above and below, and its air space.	Presence of deep-sea trenches Major source of seafood for North and South Torbia
3	The South China Sea , above and below, and its air space.	Major trade routes for the region Disputed territory – Olvana and South Torbia Restrictions apply
4	Belesia	General Santos City designated as theatre entry point to the AO FOB for RAAF/RNZAF
5	The Sulu Sea and Celebes Sea above and below, and their airspace	Important sea route for regional trade
6	Cyber/space domain	Restrictions apply

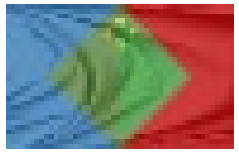


MNF-OBA AREA OF INTEREST (AI)

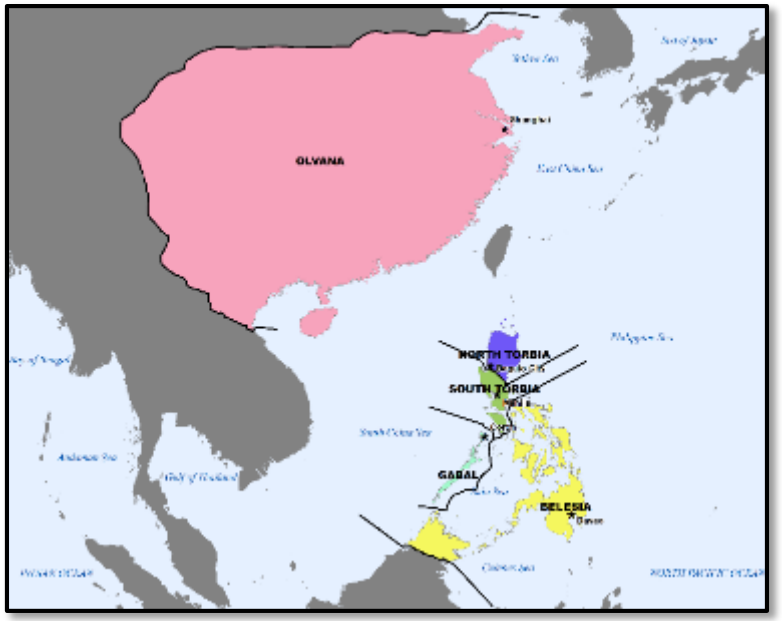
AI	Location	Significance
AI 1	Olvana	Provision of equipment/capability by proxy Logistic spt
AI 2	Donovia	Provision of equipment/capability by proxy Logistic spt
AI 3	Ariana	Provision of equipment/capability Logistic spt
AI 4	Indian Ocean	Major sea route between Donovia/ Ariana and North Torbia



Support to North Torbia

Olvana 	Donovia 	Ariana 
• Satellite capability for surveillance, reconnaissance and navigation • Internet services • OTH Radar • YLC-8B 3D Long-Range Anti-Stealth Surveillance Radar • Y-8G (High New 3) Long-Range Electronic Jamming Aircraft flying under Olvanan livery • KJ-2000 (Mainring) Airborne Early Warning and Control Aircraft flying under Olvanan livery • H-6 (Hong-6) Chinese Strategic Bomber • J-16D EW aircraft • DF-11 SS Short Range Ballistic Missile to replace the ageing SS-21 • DF-21D Anti-Ship Ballistic Missile • YJ-12 Supersonic Anti-Ship Cruise Missile • HQ-9 (Hong Qi 9) 8x8 Long-Range Air Defense Missile System crewed by either Olvanan personnel or contractors • FN-6 (FEI Nu-6) man portable AD system (MANPADS) most likely deployed with North Torbian SPF.	S-400 Triumph (SA-21 Growler) Long-Range Surface-to-air Missile System crewed by contractors and supported by Donovian AD military advisors	• Qasef-1 – a recon and loitering munition drone • Mohajer-4 – a tactical UAV • Shahed-129 – medium altitude long-endurance UAV

BACKGROUND – THE REGION



Relationships

Relations among the nations in this region are a tense game of power. As Donovia's strategic influence has shifted to Europe and the Caucasus regions, Olvana has aggressively sought to press its will on the region. Similarly, nations such as South Torbia, Gabal, and Belesia view the shift as an opportunity to grow their influence and develop economic ties both in the region and with external partners.

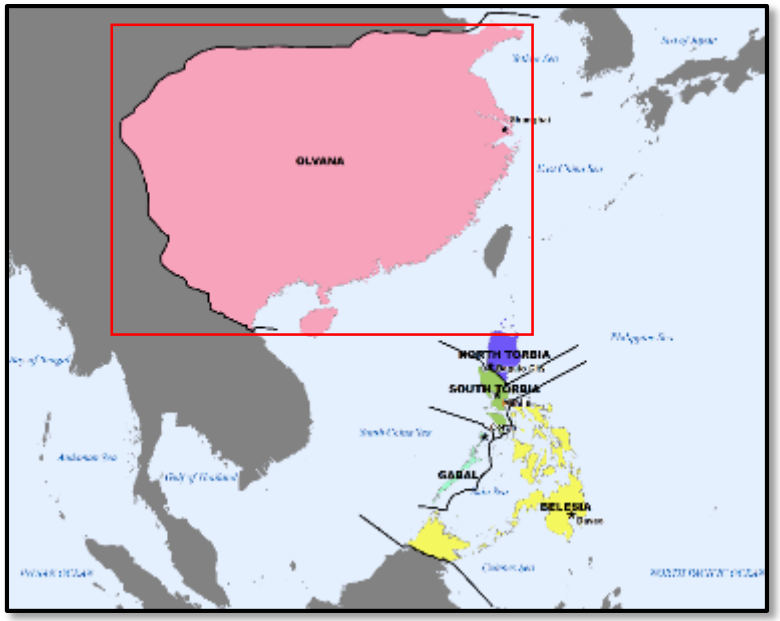
Control of Resources

Control of critical mineral and fishing resources, manufacturing, and unfettered transport of goods in the region's shipping lanes is a key point of tension for all. Within the states of the region, groups that had previously seen no opportunity for influence view the instability as a path to develop their voices.

Internal conflicts

Internal conflict is a persistent and potentially destabilising factor as governments position for legitimacy and consolidate their power. Whether expanding influence or building new power bases, the region will continue to be a driver of worldwide tensions and increasing volatility. A major ongoing issue of concern is the North Torbian goal of uniting the two Torbias under the Song regime.

BACKGROUND – OLVANA



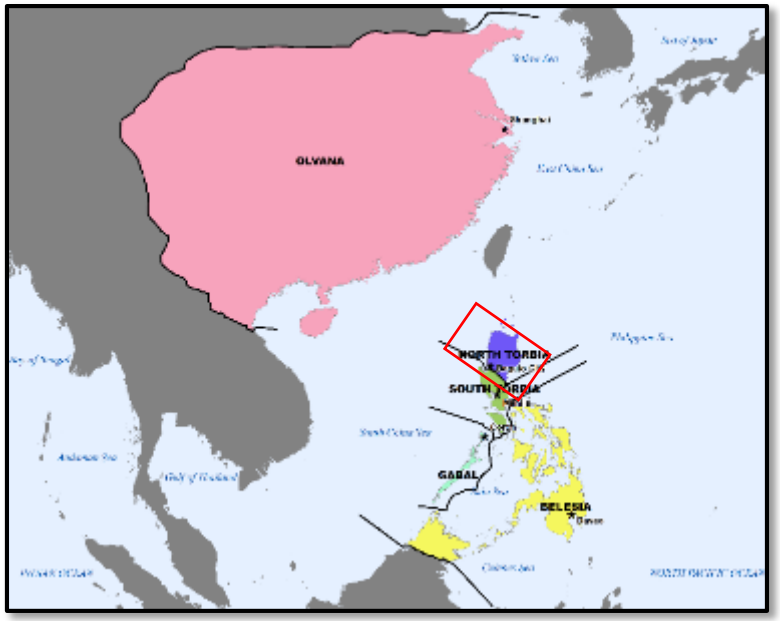
The People's Republic of Olvana is a communist nation created in the mid-20th Century after several decades of internal civil conflicts and global wars. Though the government has evolved over its seven decades of existence, it is still dominated by the Olvanan Communist Party. Olvana's massive economy and modernising military have enabled it to become a regional hegemon capable of exerting tremendous pressure and influence throughout the region and across the globe.

Olvana's primary strategy is to project its strength through economic activities. Olvana is the world's second largest exporter and has adopted the soft power tool of money, via investments and project funding, to expand its influence. Joint economic and political projects between Olvana and other Asian nations have been on the rise and Olvana views contrary security policies as an attempt to encircle Olvana and deny them the right to regional influence.

Olvana remains the primary trading partner, ally, and patron of North Torbia. Although Olvana has upheld some of the international sanctions against North Torbia and taken some measures to squeeze it economically, including the suspension of fuel sales and restrictions on financial activities, relations appear to have thawed somewhat over a number of issues.

In recent years, Olvana and South Torbia have endeavoured to boost their strategic and cooperative partnership in numerous sectors, as well as promoting high level relationship. Trade, tourism and multiculturalism, specifically, have been the most important factors of strengthening two countries' cooperative partnership.

BACKGROUND – NORTH TORBIA



The Democratic People's Republic of Torbia (DPRT), also called North Torbia is self-described as a “self-reliant socialist republic”, but its structure is deeply totalitarian, wholly reliant on a cult-of personality and militarism for survival. DPRT's stated mission is the unification of all of Torbia, but only under the control of the Song family whose family has ran the country since its founding.

The Torbian War was a formative event for North Torbia’s government. Song Jin Su, along with Olvanan advisors, convinced Olvana that a North Torbian invasion of the south, the Republic of Torbia (RoT), would be quick and decisive, resulting in the island being unified under North Torbia’s communist government. After the interventions of the UN and Olvana ultimately resulted in a stalemate that endured for nearly three more years before ceasefire terms were finally agreed upon.

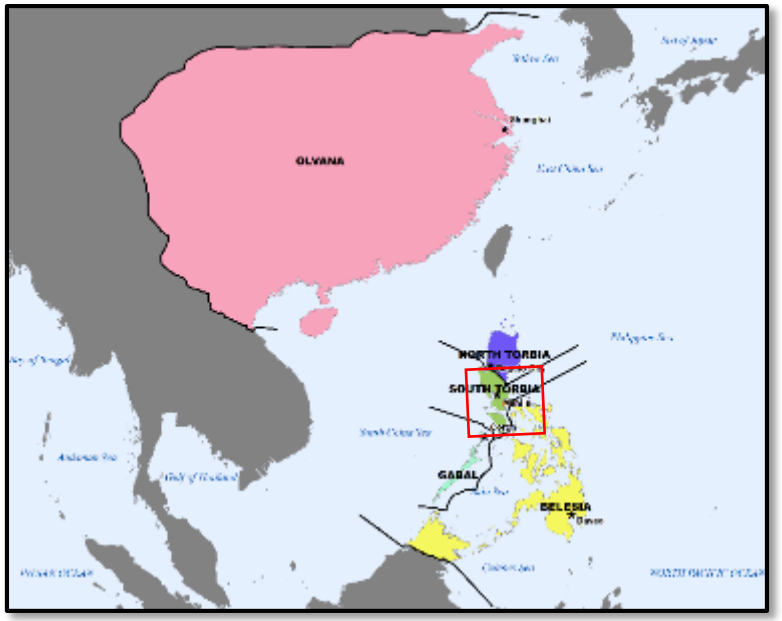
The war helped to consolidate Song’s power and gave rise to the idea of self-reliance that has dominated North Torbian politics since that time. The war also set into motion a series of complex diplomatic confrontations with South Torbia, Olvana, and the US that would eventually lead to North Torbia’s isolation and militarism.

North Torbia’s complete isolation from most of the world has made its relationship with Olvana extremely critical. With decades of sanctions placed on North Torbia, Olvana has the greatest influence on the direction of its ally and is often called upon to restrain North Torbia’s more irrational and threatening actions. Olvana has walked a precarious line in avoiding world condemnation and support of North Torbia.

North Torbia would eventually joint the Non-Aligned Movement, a declaration of their independence from Olvanan control and a strong endorsement of self-reliance. North Torbia was, however, still heavily dependent on Olvana as a trading partner, investor, and provider of financial and military aid.

North Torbia views South Torbia as its territory, as does South Torbia see North Torbia. This impasse and the two diametrically opposed government systems all but preclude reunification of the peninsula under one banner. Nevertheless unification and under the Song regime is an important goal.

BACKGROUND – SOUTH TORBIA



The Republic of Torbia, also called South Torbia, is a constitutional republic that occupies most of the south half of the island of Luzon. After centuries of foreign occupation and despotic rule, South Torbia emerged in the late 20th century as one of the world's fastest growing economies, and today is one of the world's wealthiest, most stable, and most militarily powerful nations.

A massive corruption scandal that included the president has recently rocked the South Torbian government to its core, creating many questions about the stability and viability of the current republic. The South Torbian military is primarily a defensive force aimed at stopping the Democratic People's Republic of Torbia from taking over the entire country.

Olvana remains the primary trading partner, ally, and patron of North Torbia. Although Olvana has upheld some of the international sanctions against North Torbia and taken some measures to squeeze it economically, including the suspension of fuel sales and restrictions on financial activities, relations appear to have thawed somewhat over a number of issues.

Relations with Olvana deteriorated significantly after South Torbia announced its intentions to deploy missiles on its boundaries, a move that Olvana strongly opposed. Olvana imposed an unofficial boycott on South Torbia in an attempt to stop them from deploying the missile system. In the past five years, the two countries ended the long diplomatic dispute and have returned to diplomatic discussions regarding exchanges and cooperation in a variety of areas. All Olvanan economic and cultural bans on South Torbia have been lifted, with political and security cooperation, business and cultural exchanges between the two countries resuming.

ROAD TO CRISIS

September 1947	Modern states of North and South Torbia created from hasty negotiations between the United States and the People's Republic of Olvana following the occupation of the Torbian archipelago during World War II. North and South Torbia were given independence and declared nations on September 15, 1947.
June 1950	Driven by its leader, Song Jin Su's desire to unite the two Torbias, North Torbia invaded South Torbia in June 1950. Faced with annihilation South Torbia seeks assistance from the UN. UN forces counterattack and drive deep into North Torbia. Subsequent Olvanan intervention ultimately resulted in a stalemate that endured for nearly three more years. Ceasefire terms were finally agreed in 1953 establishing a Military Demarcation line (MDL) along the original border created in 1947. The Northern Limit Line (NLL) was created shortly after the Ceasefire Terms of Agreement were signed in August 1953 by the United Nation Command (UNC) to ensure South Torbian fishing and naval vessels did not venture far enough north to spark clashes. Over the years the NLL remains one of the most serious potential flashpoints for conflict.
1950s and 1960s	Following the war, Olvanan interest in North Torbia led to substantial foreign investment growing the North Torbian economy and industrial capacity rapidly throughout the 1950s and early 1960s. South Torbia became one of the world's wealthiest and most stable nations. It is a highly developed, mixed-market nation, with a strong economic core, with 60-70% of the economy driven by free-market dynamics. Despite these developments the Song government still harbours a strong desire to unite the two countries, a cause that the Song Regime will use to justify another invasion of South Torbia in the future.
1970s and 1980s	During this time Olvana gradually began lessening both political and economic interaction with North Torbia. This led to a complete collapse of the North Torbian economy in 1986. Widespread hunger and political instability ensued; the Worker's Party of Torbia (WPT) responded by increasing restrictions on travel, cracking down on dissidents. North Torbia also began a nuclear weapons and power program.
1994	In 1994, Song Ji-Su died and was replaced as dictator by his son, Song Ji-Hoon. The elder Song never established specific official positions. Thus, it fell to the younger Song to establish himself as party secretary and president. Soon after Ji-Hoon took power a combination of factors, primarily flooding, global sanctions, and the collapse of global communism, combined to create an enormous food shortage and famine throughout North Torbia.
The late 1990s	Despite this calamity Song Ji-Hoon expanded North Torbia's nuclear and missile development while gradually increasing the role of the military in government. By 1998, North Torbia had codified a military first policy that made the Torbian People's Army (TPA) the most powerful political body in the country.
June 2010	A gun battle ensued between South and North Torbian naval ships in the Philippine Sea. North Torbian patrol boats allegedly crossed the Northern Limit Line (NLL), the disputed maritime demarcation line, and opened fire on a South Torbian patrol boat. Four South Torbians and an undetermined number of North Torbians were killed in the battle.
February and March 2011	North Torbia test-fired a short-range, anti-ship missile into the Philippine Sea. North Torbia had provided South Torbia with warnings of the imminent test but failed to provide information on the date. During the following month North Torbia fired a Silkworm shore-based SSM into the Philippine Sea. This is viewed as the origins of its anti-access and area denial (A2AD) strategy.

ROAD TO CRISIS

October 2011	North Torbia announced a successful underground nuclear test on 11 October 2011. This test was verified by the United States and other outside nations via radioactivity and seismographic readings. In response, the United Nations Security Council, citing Chapter VII of the UN Charter, unanimously adopted Resolution 1718 condemning North Torbia's action and imposed sanctions on certain luxury goods, trade of military systems, weapons of mass destruction (WMD)-related parts, and technology transfers between United Nations member states and the DPRT.
July 2012	North Torbia shut down a nuclear facility located in Aparri, as well as an uncompleted reactor at Vigan. Personnel from the International Atomic Energy Agency (IAEA) travelled to North Torbia to monitor and verify the shut-down as well as to seal the facility. Concurrently, South Torbia, Olvana, United States, and Donovia initiated deliveries of approximately 50,000 metric tons of Heavy Fuel Oil (HFO) per month, with South Torbia completing delivery of the first tranche of 50,000 metric tons in August, Olvana the second in September, the United States the third in November, and Donovia the fourth in January 2013. These four parties were expected to continue to provide monthly shipments of HFO as North Torbia continued to implement denuclearisation steps.
May 2013	North Torbia detonated a second nuclear device. This drew immediate condemnation and UNSC Resolution 1874 which further tightened economic and technological sanctions against North Torbia as well as authorising the search of all DPRT vessels outside of North Torbian waters. The US and its allies agreed to assist the South Torbian Navy in the conduct of constabulary operations.
June 2014	The Indo-Pacific Anti-Nuclear Alliance (IPANA) was formed when the United States, Australia, New Zealand, South Torbia, Belesia, Japan, Singapore, Indonesia and Malaysia agree to work together to ensure that nuclear weapons would never be used in future conflicts in the Indo-Pacific Region. The membership was expanded when the island nations of Fiji, Vanuatu, Tonga and Papua New Guinea join IPANA a few weeks later. Gabel declined an invitation to join the alliance. Song Ji-Hoon denounced the formation of IPANA claiming that it was part of a plot to undermine and intimidate North Torbia. He announced that the North Torbian military forces would embark on a program of modernisation as a counter to this threat and enable North Torbia to extend its influence well beyond its borders. Satellite images of the naval shipyards in Laoag showed extensive construction work and excavation on the shore line. Experts assess that the North Torbians were constructing a dry dock.
November 2014 – November 2015	In November 2014 ROT and DPRT naval forces exchanged fire in the Philippine Sea. South Torbia suffered a number of sailors killed while a Torbian People's Navy (TPN) vessel was heavily damaged with unknown casualties. Reports indicated that the vessel was capable of conducting blue water operations. In March 2015 a South Torbian frigate was sunk with the deaths of 146 sailors. An international investigation concluded that a North Torbian submarine was the most likely cause. Donovia and Olvana refused to accept this finding. In November of the same year North Torbian artillery bombarded the South Torbian island of Jomalig. The South Torbian Army retaliated. The DPRT claimed that the shelling was in response to South Torbian artillery fire across the NLL. South Torbia denied this to be the case and reinforced the garrisons on its Philippine Sea islands.

ROAD TO CRISIS

December 2015	Song Ji-Hoon, North Torbia's "Dear Leader," died of a suspected heart attack near Baguio. Amid discussions of his long-term viability, Song Chong-Su ascended to become leader of North Torbia. Reports indicated that all was not well in North Torbia with some of the ruling class seeing this an opportunity to adopt a more open and free society in North Torbia. They also believed that it would provide an opportunity to explore unification with South Torbia which would be acceptable to both countries.
February-November 2016	Concerned with these developments, Song Chong-Su conducted bloody purges of North Torbian elites he perceived as disloyal to him. Incidents of the purge included execution via mortar firing squad, public immolations, and banishment to the DPRT's extensive network of prison camps. To counter the potential that some senior military leaders may also oppose his leadership, Song Chong-Su also ordered the creation of a cadre of political officers to exert political control over the military. These political officers were to be attached in every unit and formation, from battalion to division-level, including the navy and air force.
April 2016	The DPRT attempted to launch a satellite into space on what would have been Song Yang-Hwan's 100th birthday. The rocket spectacularly failed, causing the DPRT to lose a great deal of face. In addition, the United States immediately suspended all food aid to the nation and attempted to persuade Olvana to put pressure on North Torbia's leaders to stop conducting provocative actions. South Torbian intelligence sources confirmed that construction of the dry dock facility at the Laoag Naval Base was well underway. Estimates indicated that it would take at least two years to complete construction.
January-June 2017	East Asian Respiratory Virus (EARV), a global pandemic thought to have emanated from a live animal market in Olvana, killed over three million people world-wide and caused a major financial crisis. Over a period of six months the developed world's unemployment averages spiked to over 14%. South Torbia gained international recognition for its ability to navigate the pandemic both from the health and economic standpoints. North Torbia attempted to claim similar success but without any way to verify its claims, consequently the secretive pariah state failed to gain recognition, even from Olvana. Song Chong-Su was allegedly furious over the slight.
April 2018	Lieutenant Colonel Min Huk Park, a North Torbian military attaché, defected to Switzerland. Park alleged that North Torbia's elites were definitely starting to feel the pinch of sanctions and that Song Chong-Su was barely maintaining power. He also provided information covering the signing of contracts with Donovia for the provision of S-400 SAM systems, and Olvana for the provision of internet services, access to a range of Olvanan military satellites as well as the latest ASM and SAM technology. He also provided information regarding the integration of North Torbian assets into Olvana's A2AD strategy. This would enable Olvana to extend its coverage well into the Philippines Sea threatening Okinawa and Guam. South Torbian intelligence agencies reported that the construction of the dry dock facility at Laoag Naval Base had been completed. The full Amphibious Ready Group with associated escorts and support ships sailed for Ex-Risen Sword. The force was close to the entire Western Fleet and double the usual North Torbian Force for the exercise.
December 2018	Lieutenant Colonel Park was assassinated by a group of 6-10 assailants while on his honeymoon on Polillo Island in South Torbia. The hit team was intercepted during egress across the beach by a South Torbian patrol, at which point the men committed suicide via explosives. North Torbia was suspected, with some witnesses claiming a submarine was sighted off the coast escaping on the surface. South Torbia was unable to establish definitive contact with any vessels despite an intensive search, although a submarine support ship was sighted close to the north of the island.

ROAD TO CRISIS

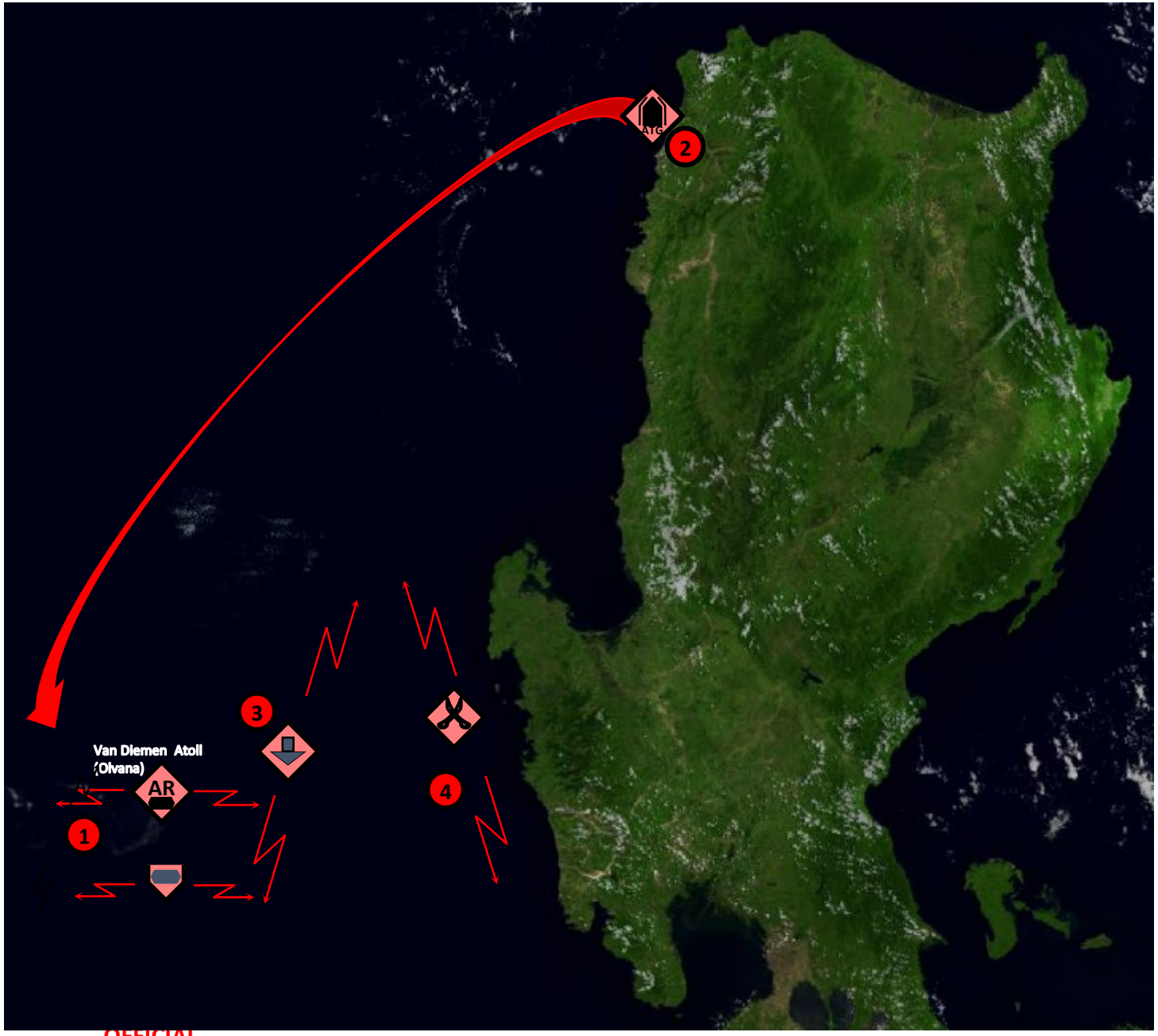
January – February 2019	South Torbian intelligence presented definitive proof that North Torbia had received Pakistani nuclear miniaturisation plans as well as thermonuclear schematics from a third nation. Further investigation led to a February 2019 report that this nation was Ariana. North Torbia conducted three high-yield thermonuclear tests on 14-15 February. The first test was registered as 25 kilotons, the second and third as 75 kilotons. The United States and Great Britain called for an emergency session of the UNSC. The PRO attended only to inform the session that it would veto any further resolutions concerning North Torbia until such time as the United States agreed to cease selling arms to "non-United Nations member nations."
March 2019	An Olvanan-flagged RO/RO vessel which departed Bandar Abbas, Ariana makes a detour to Aparri, North Torbia. Imagery reveals the vessel offloading multiple armoured vehicles and uploading several large shipping containers. The vessel departed Aparri where it was escorted by three OPN destroyers on its return to Bandar Abbas. The United States, Australia and New Zealand lodged formal protests with the UNSC and the Olvanan embassy in the United States and Australia.
April – June 2019	The North Torbian Eastern fleet sailed to conduct a two-month long exercise in the Philippine Sea. Intelligence sources reported that the exercise would focus on SEAD procedures that also involved the North Torbian Air force. South Torbian naval forces shadowing the Eastern Fleet sighted Hong-6 bombers, an AWACS aircraft, a KJ-2000 (Mainring) and a number of J-16D Olvanan Radar-jamming Electronic Warfare Aircraft participating in the exercises. This confirmed reports that the North Torbian Air Force had replaced a number of its ageing platforms with more lethal Olvanan aircraft. The Eastern Fleet deployed to home parts towards the end of June.
June 2019	South Torbian intelligence services reported that in a secret North Torbian meeting, Song Chong-Su allegedly planned for a "reunification war" in mid-2020. Various means of strategic deception were agreed upon at this time. It was unknown if Olvana and Donovia are complicit in the DPRT's war planning. Satellite imagery identified that two floating docks had arrived at Laoag Naval Base, each one capable of housing an LHD. South Torbian intelligence sources indicated that the docks were provided by Olvana. Satellites monitoring Exercise Risen Sword showed that North Torbian involvement consisted of only a small surface combatant group taking part in the exercise. No North Torbian amphibious vessels were identified.
July 2019	Satellite imagery of the Laoag Naval Base showed significant concurrent re-fit and maintenance activity being conducted focusing on the Amphibious Force. The Western fleet activity had also been significantly reduced when compared to normal annual patterns of activity.
May 2020	The majority of the Eastern Fleet sailed from its home ports and split into an assessed Orange Force simulated by an AOR and two DDs. The remainder of the fleet comprising the NT Blue Force. EMCON Silent Operations practiced utilising a SAG of two FF proceeding down to the South. A Shahed-129 Arianian Medium-Altitude Long-Endurance Unmanned Combat Aerial Vehicle (UCAV) was sighted conducting sorties to the NE of the Orange Force. The fleet deployed back to home ports after 10 days.
August 2020	The TPA conducted a multi-division exercise west of Baguio. South Torbian intelligence noted that operational level coordination among TPA division and corps level staffs seems to have markedly improved. In late August a submarine was sighted surfacing off the west coast of South Torbia IVO San Antonio in the early hours of the morning. After about 10 minutes the vessel submerged and disappeared. South Torbian intelligence reported that known members of South Torbian Communist Army (TCA) in San Antonio, Angeles and Batangas City conducted a number of meetings with unknown personnel but suspected to be members of the PTA SPF.

ROAD TO CRISIS

November 2020	The DPRT launched a cyber-attack against the US and South Torbia with limited success, only temporarily disrupting the Joint Network. This established that North Torbia was seeking to enhance its cyber capabilities and was attempting to integrate cyber warfare as part of its overall military strategy.
December 2020	On 2 December 2020 various allied and neutral intelligence services reported that North Torbia's Central News Agency announced that an assassination attempt had been made on Song Chong-Su who was visiting a high school in the city of Santiago. The announcement said that an explosive device was detonated in one of the classrooms killing the teacher and a number of the students. Although a visit by Song Chong-Su to this classroom was scheduled, the device was initiated before he entered the classroom. Although shaken he was not injured. Within hours a suspect was arrested and detained by North Torbian police. Identified as XXXX he confessed to the assassination attempt and also confessed to being a member of United Torbia whose expressed intent is to establish a united Torbia with a democratically elected government. Three days later, the Torbian Central News Agency reports that "capitalist reactionaries" under the control of the "perfidious figures close to the Brilliant Successor" attempted to kill Song Chong-Su while visiting a high school in Santiago. In a speech to the UN General Assembly the North Torbian representative denounced the assassination attempt as a South Torbian plot to destabilise North Torbia as a prelude to an invasion of North Torbia to unite the two countries under South Torbian rule. He promised that retribution would be swift.
January 2021	The alleged suspect arrested for the attempted assassination of Song Chong-Su was found guilty of murder, attempted murder and treason, sentenced to death and summarily executed in late January. A two-month long series of purges began following the execution. Elements of the North Torbian Amphibious Ready Group with associated escorts and support ships sail for Ex-Risen Sword. The force is close to the entire Western Fleet and double the usual NT Force for Exercise Risen Sword.

EX RISEN SWORD – W-XX

1. After reviewing satellite imagery of Van Diemen Atoll South Torbian intelligence identified an SSG and supporting AS south of the atoll. They were assessed to have been on station for approximately one week.
2. At the same surveillance satellites detected a large amphibious force sailing from Laoag Naval Base. Based on previous analysis it was likely to be the North Torbian ATG sailing to participate in EX RISENSWORD with Olvanan naval forces. The ATG's destination was likely to be Van Diemen Atoll which the Olvanans had used in the past for this exercise. Imagery confirmed that the ATG consisted of seven Amphibious Units, three DD, three FF and one AOR. This was double the size of the usual force for Ex Risen Sword. A surface group consisting of Hobei and Boghammar sailing with the ATG was also detected.
3. Analysts assess that the FFs would likely provide Air point defence but would also be available for NGS tasking as directed.
4. The Fast Attack SQN was detected patrolling in two lines off the coast of South Torbia. The Boghammars were detected in littoral, with the Houbei vessels further seaward. They were assessed to be acting independently more than likely to harass and make opportunistic attacks on vessels that were not part of the ATG.
5. No Olvanan naval vessels were identified in the area.



NORTH AND SOUTH TORBIAN FORCE DISPOSITIONS W-XX

On W-XX satellite imagery detected that North Torbian Southern Army Forces remained in garrison locations as follows:

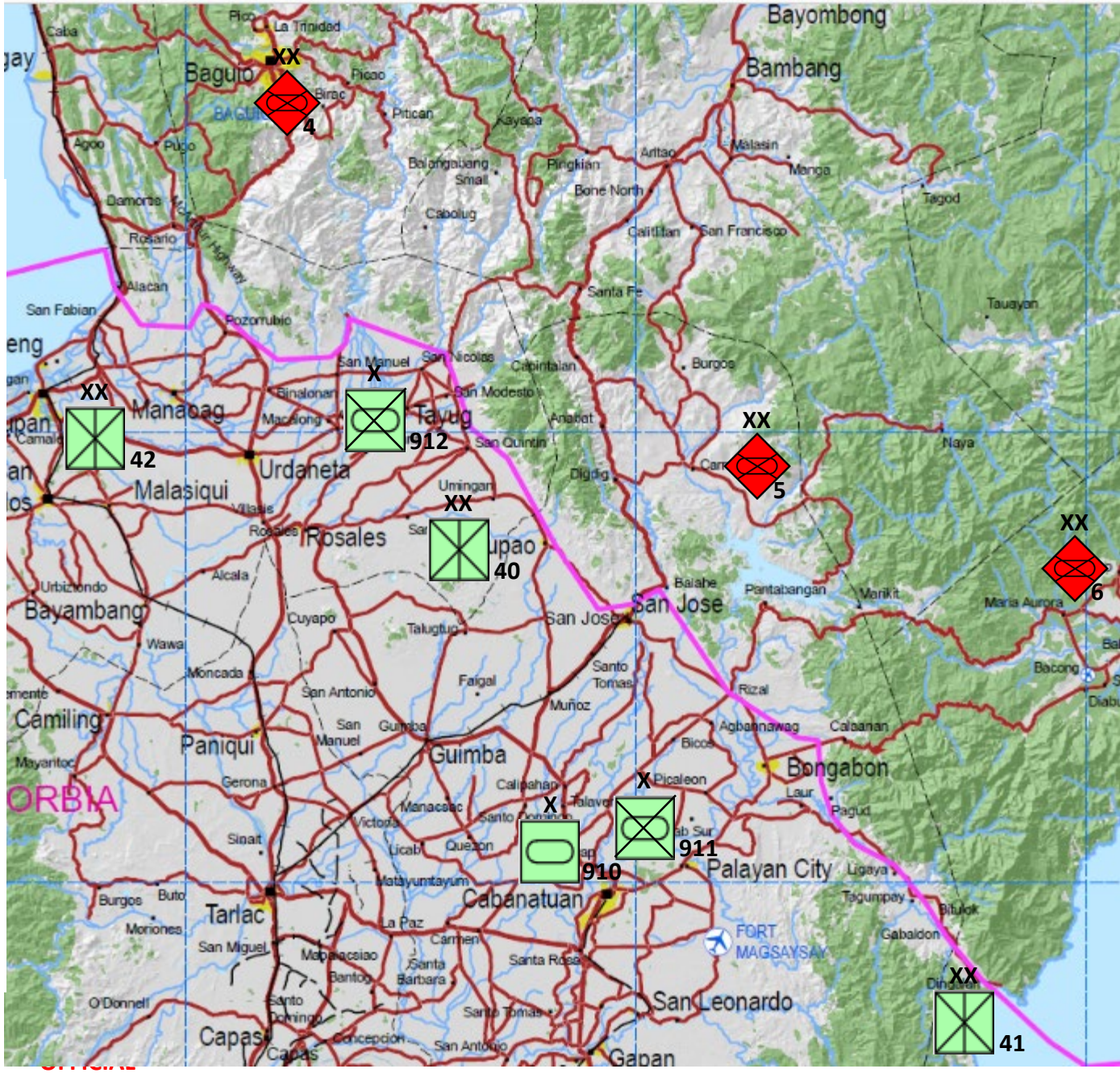
- 4TH MECH INF DIV – BAGUIO
- 5TH MECH INF DIV – CARRANGLAN
- 6TH MECH INF DIV – MARIA AURORA

South Torbian 1ST Army Forces were located at:

- 42ND MTZD DIV – DAGUPAN
- 912 MECH BDE – TAYUG

South Torbian 2ND Army Forces were located at:

- 40TH MTZD DIV – SANTO DOMINGO
- 41st MTZD DIV – DINGALAN
- 911 MECH BDE – CABANATUAN
- 910 TANK BDE - CABANATUAN

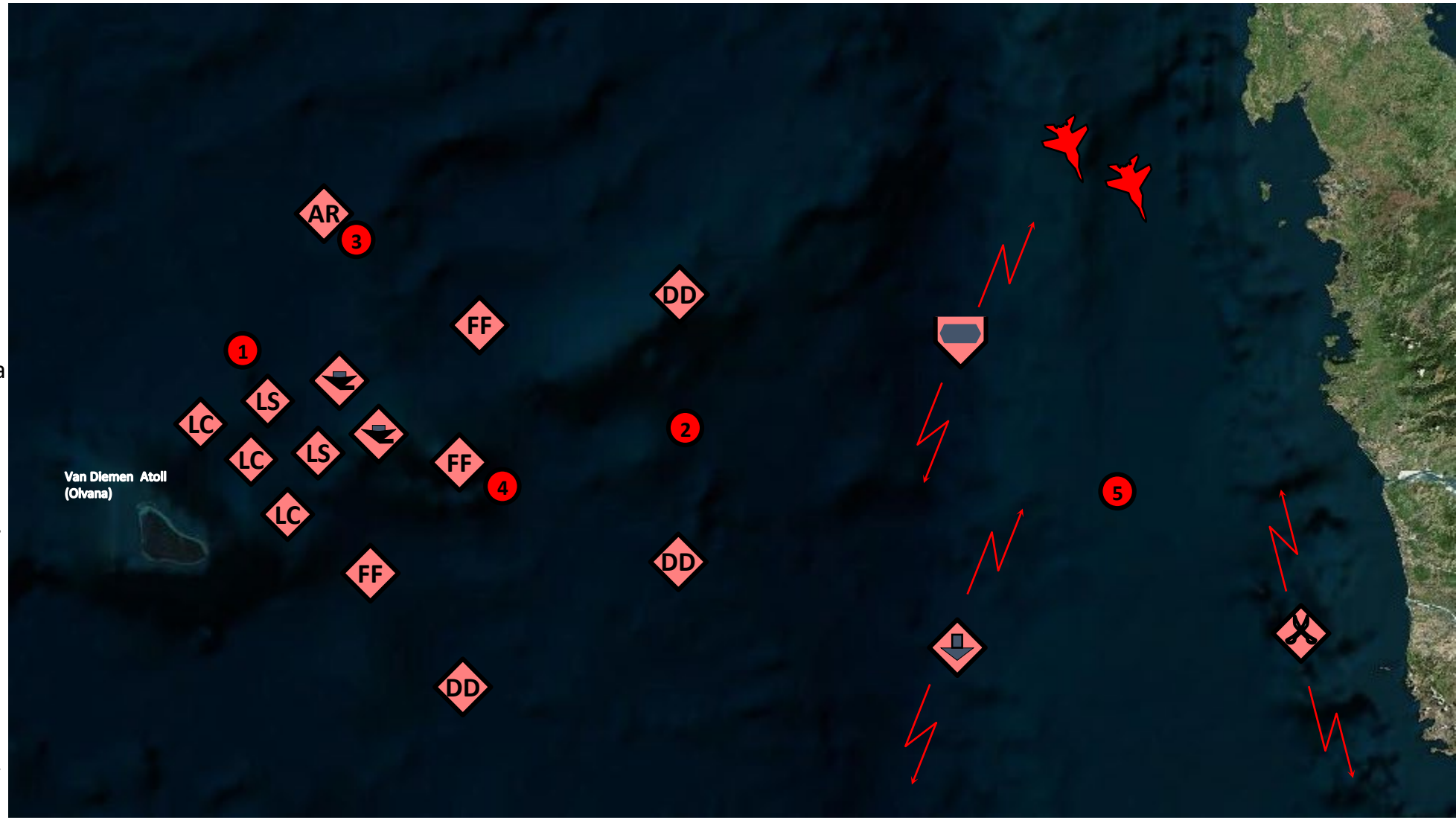


DEPLOYMENT OF NORTH TORBIAN ATG – W-XX

South Torbian intelligence agencies continued to monitor the North Torbian ATG. Imagery identified the following:

1. The ATG conducted lodgement on Van Diemen Atoll within a geographic screen. The lodgement was slick and well-coordinated.
2. DDs were likely deployed to provide a coordinated area AD, with TPAF providing AD coverage closer to South Torbia.
3. An AOR was identified operating in a RAS box to the north of Van Diemen Atoll.
4. The FFs were likely deployed to provide Air point defence and are possible for NGS tasking as directed.
5. The SSG and Fast attack SQN were likely providing a layered defence in depth with offensive opportunistic attacks.

The whole exercise was well conducted and indicates that the North Torbians have improved their skills. This provides the North Torbians with more options for a potential invasion of South Torbia to unite the two countries under the control of the Song regime.



CONDUCT OF EX RED PHOENIX (W-XX – W-XX)

Massed movement from the Southern Army's garrisons indicated that North Torbia had initiated EX RED PHOENIX, a previously announced multi-regional command military exercise. Satellite imagery indicated that it was mostly Southern Army formations participating in the exercise.

4th MECH DIV movements were as follows:

- 41st MECH INF BDE conducted a tactical road march to AGOO.
- 42ND MECH INF BDE conducted a tactical road march to TUBAO.
- 43RD MECH INF BDE conducted tactical road march to PUGO.
- 44TH TANK BDE conducted a tactical road march to TWIN PEAKS.

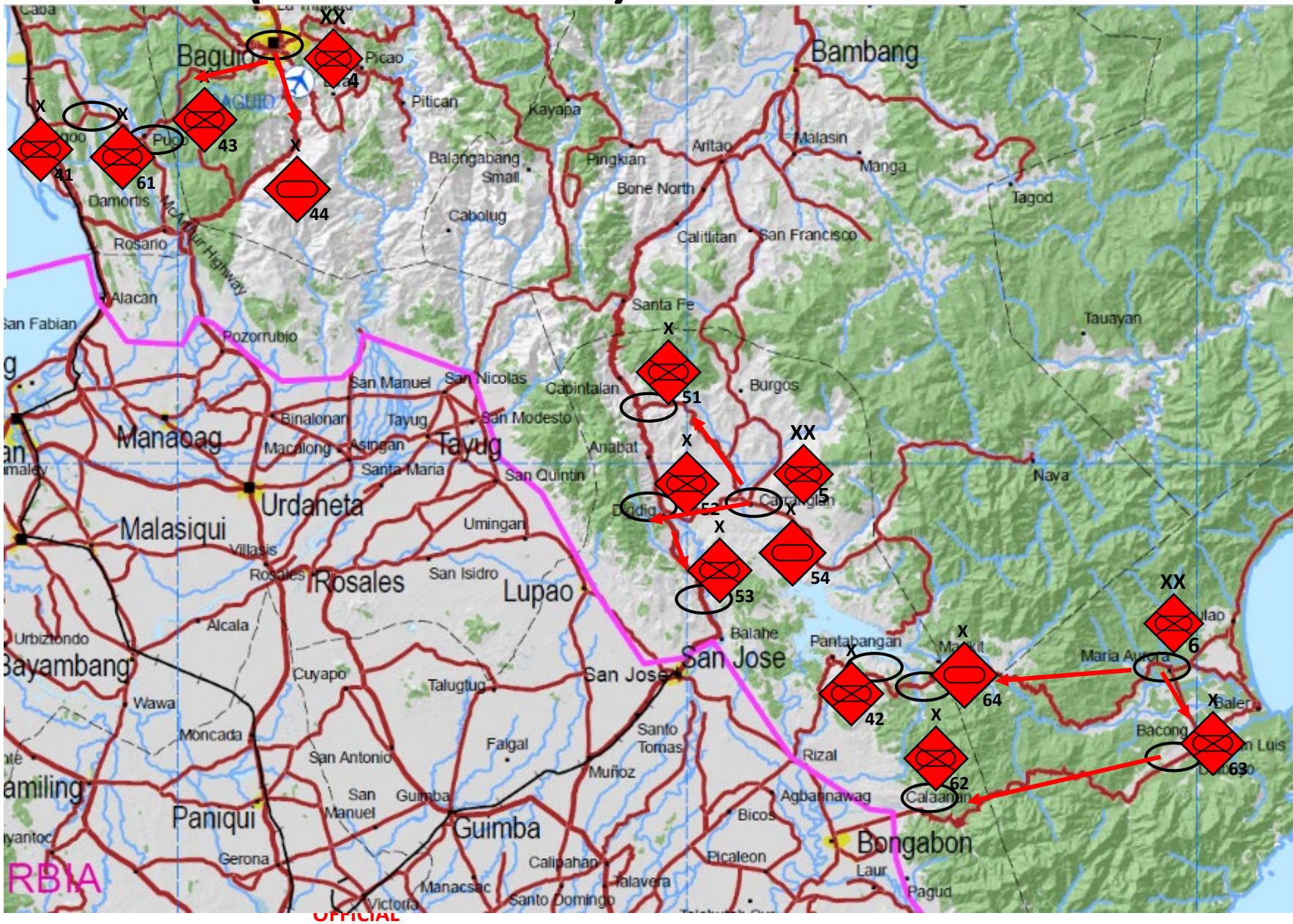
The 5th MECH DIV movements were as follows:.

- 51st MECH INF BDE conducted a tactical road march to MINULI.
- 52ND MECH INF BDE conducted a tactical road march to PIUT.
- 53RD MECH INF BDE conducted a tactical road march to PUNCAN.
- 54TH TANK BDE conducted a tactical road march to JOSON

The 6th MECH DIV movements were as follows:.

- 61st MECH INF BDE conducted tactical road march to NAPON-NAPON.
- 62ND MECH INF BDE conducted tactical road march to VILLA AURORA.
- 63RD MECH INF BDE conducted a tactical road march to TWIN FALLS.
- 64TH TANK BDE conducted a tactical road march to CADACIAN.

South Torbian intelligence sources assessed that this exercise could be a rehearsal for the preparation for an invasion by the Southern Army with initial likely objectives in South Torbia being Dagupan, Tarlac City and Cabanatuan. these would be intermediate objectives before advancing on Manila.

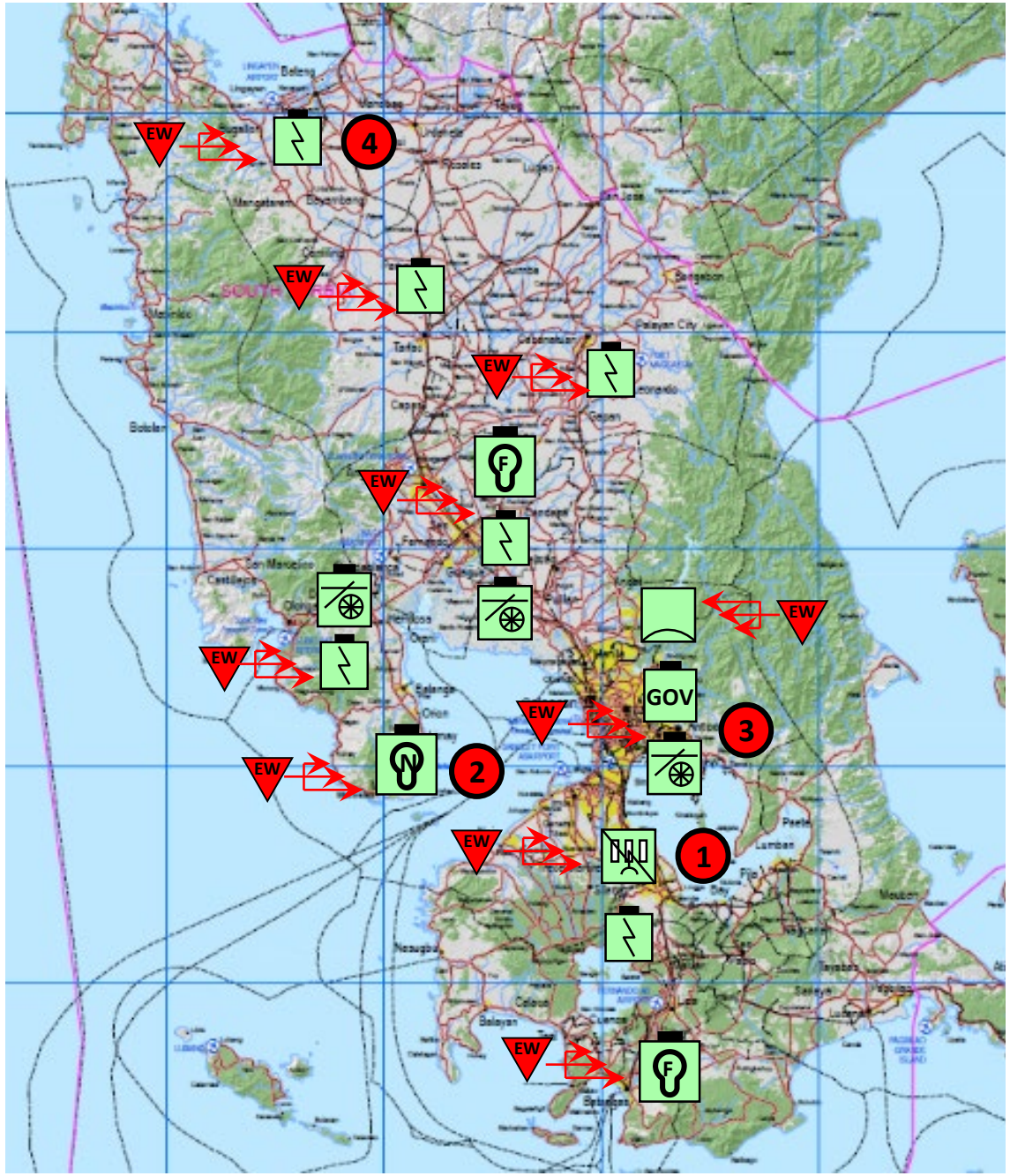


PRE-EMPTIVE CYBER ATTACKS W-XX– W-X

South Torbia and Belesia were subjected to a range of cyber attacks covering:

1. Navigation warfare attacks to disrupt sat-gnd link for sat nav and survl sats.
2. Jamming attacks to disrupt power supply to survl rdr, IADS and comms.
3. Jamming attacks to disrupt gov offices, airports/mil air bases, IADS and mil comms links.
4. Jamming attacks to disrupt telecoms facilities.

This resulted in South Torbian agencies being unable to monitor the activities of North Torbian forces, in particular the Southern Army and the ATG.



NT MEF AMPHIBIOUS LANDING IN SOUTH TORBIA – W-XX – W-X

North Torbia conducted a more targeted series of denial of service and EW jamming attacks which disabled all digital communications affecting military and police facilities in the San Narciso-San Antonio- Olongapo regions.

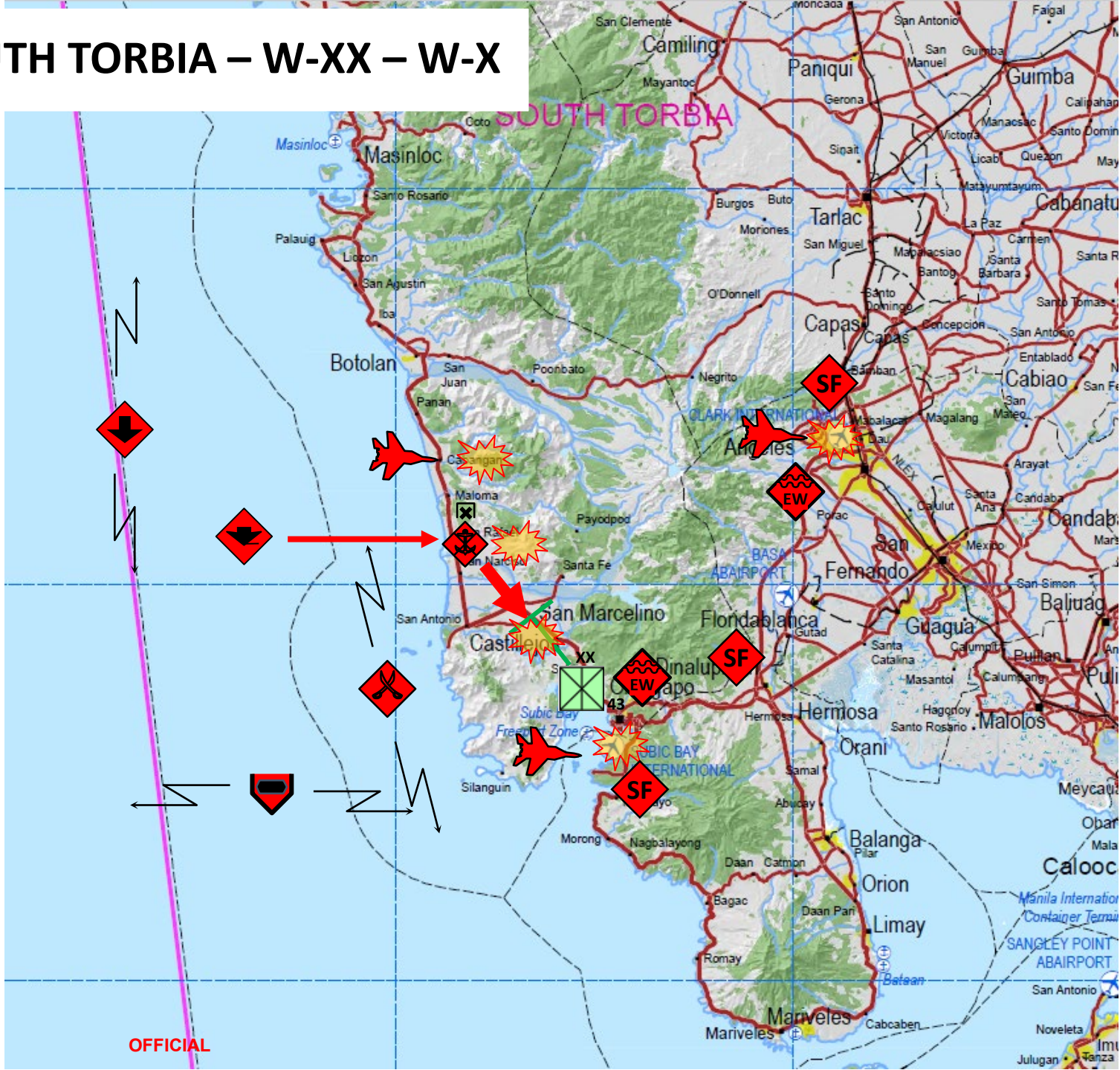
Shortly afterwards the North Torbia announced the start of OPERATION VIRTUOUS REUNION. It was initiated by the North Torbian Amphibious Task Group. Marine lands forces where deployed form the Task Group using a combined air and amphibious assault onto the west coast of South Torbia IVO San Narciso and San Antonio. A beach head was established and the NTMEF continued to build up forces on the beach.

Quickly building to bde(-) size in the beach head the forces commenced probing SEwards from San Narciso towards San Marcelino and Castillejos.

As OP VIRTUOUS UNION is initiated NT Air force bombers knock out military radar installations along the S Torbian west coast and IVO Mabalacat while North Torbian SPF teams conduct attacks on key infrastructure providing power to military installations in the Castillejos-Subic-Olongapo region and the MAGTFST command element.

A South Torbian frigate is sunk by torpedo in ST territorial waters west of Morong. NT submarines operating in the region are suspected.

To counter this threat the South Torbian 43 Div was deployed to establish a blocking force IVO San Marcelino to halt the NT MEF assault on Olongapo.



NEUTRALISATION OF SOUTH TORBIAN AIR FORCE PLATFORMS – W-XX – W-X

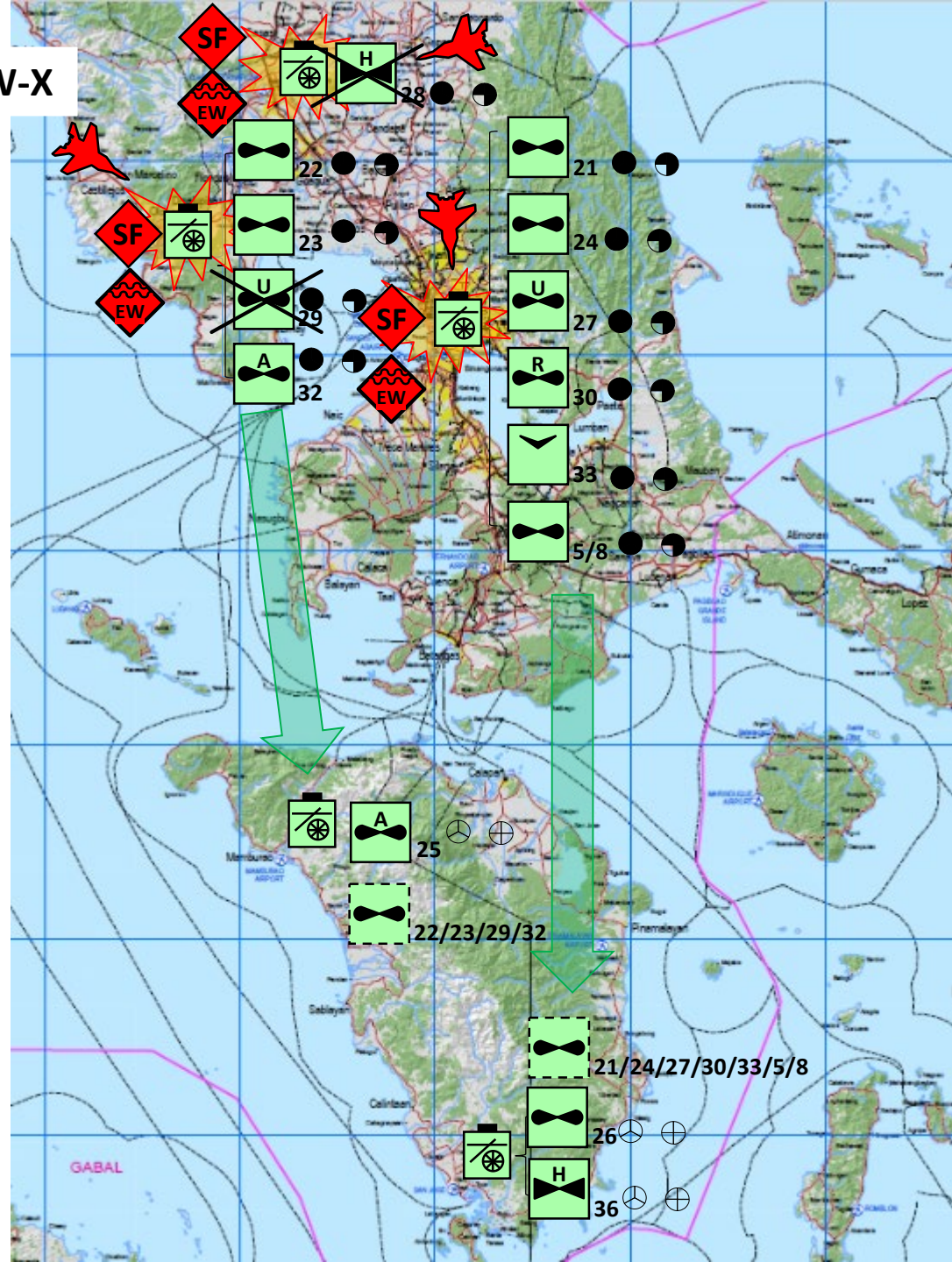
Using close air support and EW jammers North Torbian SPF conduct ed raids on Olongapo, Manila and Angeles Air Bases targeting aircraft.

At Olongapo almost 60 per cent of 22 and 23 Fighter Regt's aircraft were destroyed or rendered non-operational. All of 29 Tpt Avn Regt aircraft were destroyed and 32 GND ATTACK SQN lost up to 50 percent of its aircraft.

At Angeles Air Base all of 28 Tpt Sqn's aircraft were destroyed.

At Manila Air Base losses were extensive with all units experiencing over 85 per cent losses.

Once the attacks were finished remaining aircraft were scrambled and were redeployed to Mamburao and San Jose.



NEUTRALISATION OF SOUTH TORBIAN NAVAL PLATFORMS – W-XX – W-X

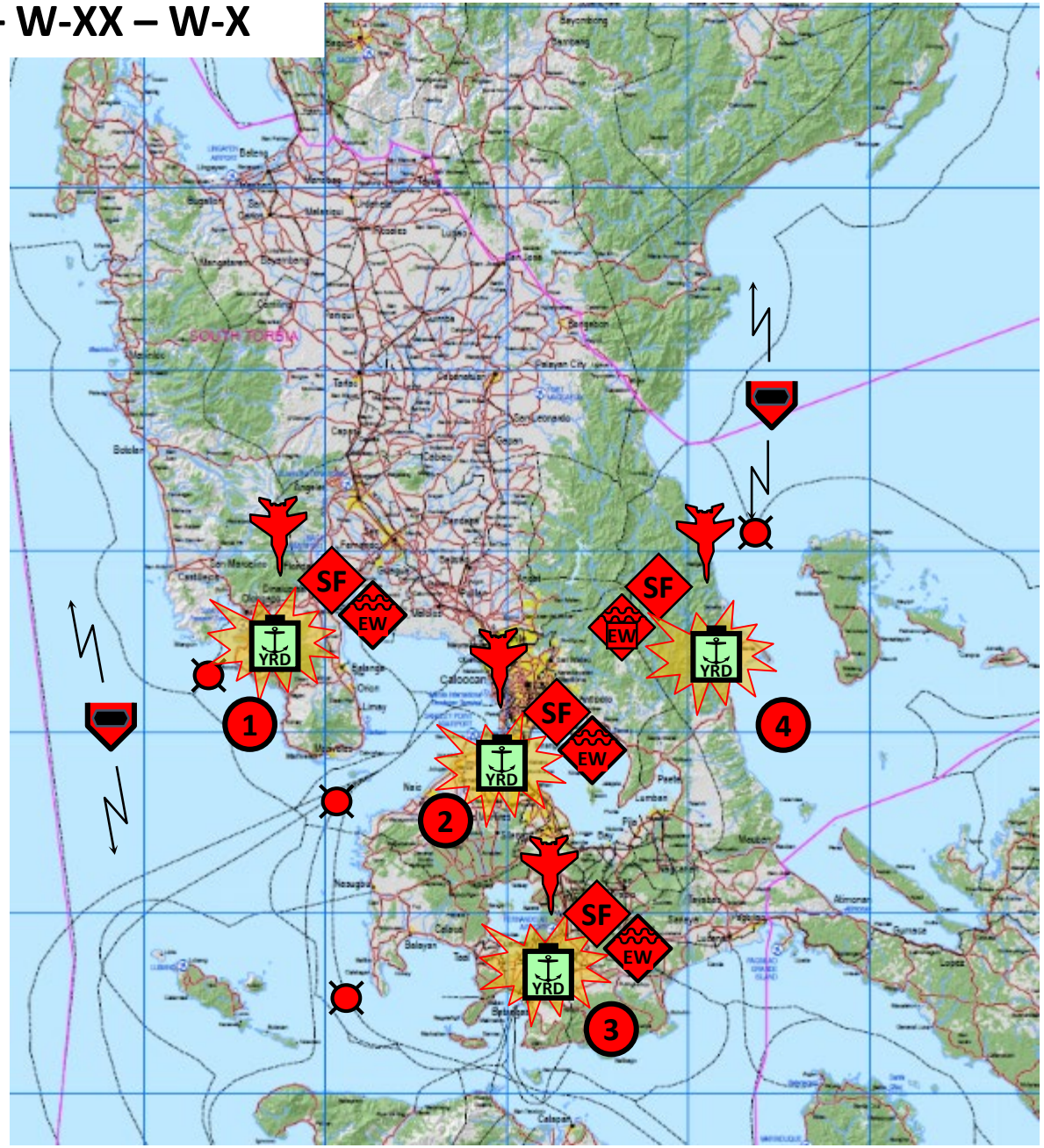
A second wave of NT Air force bombers targeted South Torbian Naval bases in:

1. OLONGAPO
2. MANILA
3. BATANGAS CITY
4. GENERAL NAKAR.

North Torbian SPF teams designated vessels for targeting while EW jammers were used to disrupt C2, comms and IADS.

At the same time North Torbian submarines laid mines in the entrance to Subic Bay, Manila Bay and in the Verde Island Passage as well as the northern entrance to the Polillo Strait.

This resulted in the South Torbian Navy no longer being an effective force with vessels unlikely to sail from home bases.



LAND BATTLE – W-Day to W+X

As the North Torbian Artillery Barrage began on W-DAy, Recon and Engr elm deployed along the MDL.

In the WEST:

- 41st MECH INF BDE moved south and fixed 42nd MTZD DIV elements IVO SAN FABIAN.
- 42nd MECH INF BDE moved south (in tactical formation) of the MDL to SISON.
- 43rd MECH INF BDE in movement to VO CASILAGAN.
- 44th TANK BDE remained static at TWIN PEAKS.

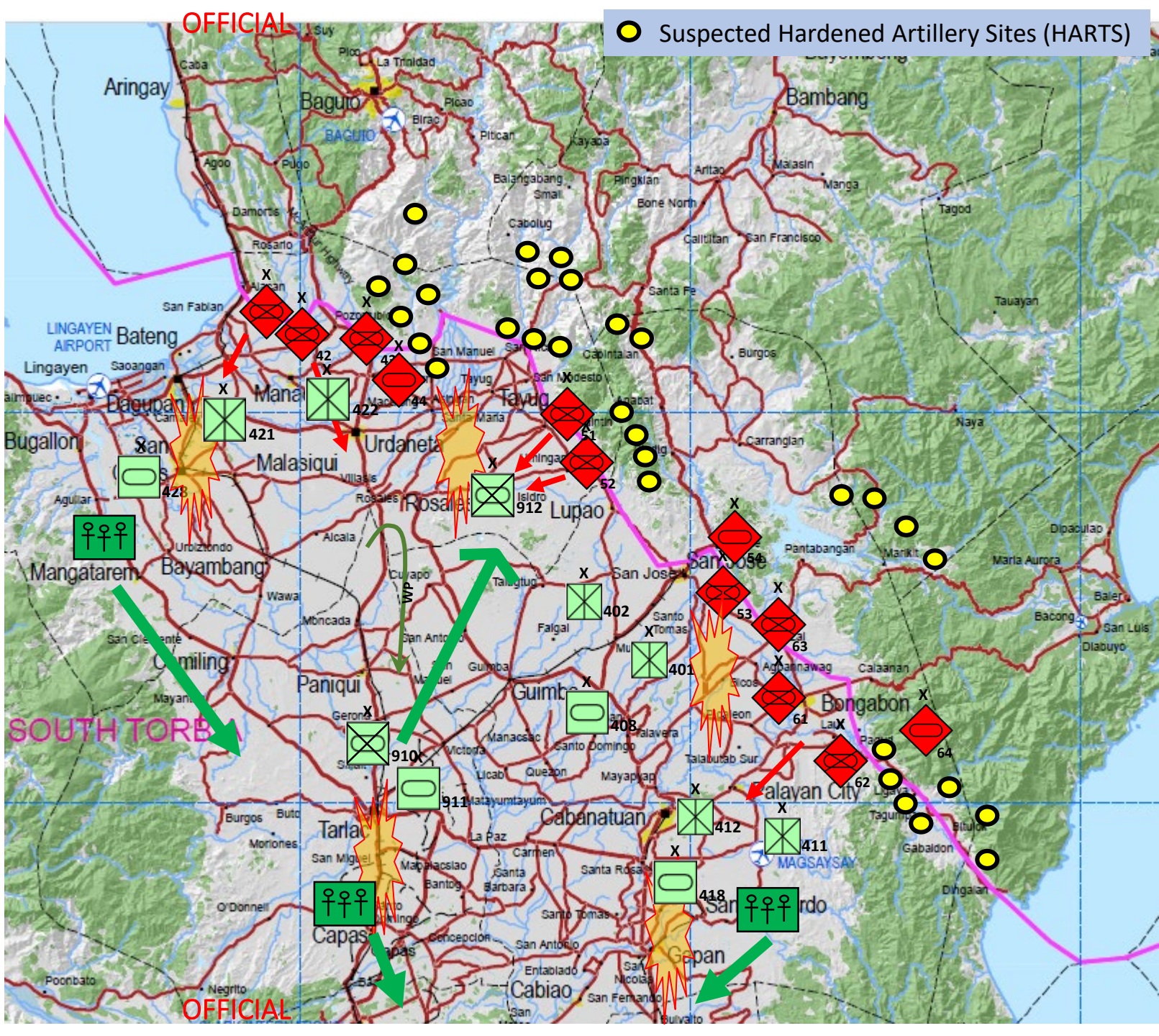
In the CENTRE:

- 51ST MECH INF BDE moved across the MDL using a combination of tunnels and engr-created channels to attack 912th MECH INF BDE (SEP) elements IVO TAYUG.
- 52nd MECH INF BDE moved through tunnels to attack 912th MECH INF BDE (SEP) elements IVO SAN QUINTIN.
- 53rd MECH INF BDE and 54th attacked 42nd MTZD DIV elements IVO SAN JOSE.

In the EAST:

- 61ST MECH INF BDE deployed 611 & 612 MECH INF BNs to attack IVO Rizal; 613 MECH INF BDE and 61 TANK BDE held in reserve to support as required.
- 62nd MECH INF BDE deployed 621 and 622 MECH INF BNs to BONGABON.
- 63rd MECH INF BDE moved to PANTABANGAN and 64th TANK BDE moved to Villa Aurora.

South Torbian 41, 40, 42 MTZD INF DIVs and 912 MECH INF BDE (SEP) remained in place to defend at the MDL/border.
910 MECH BDE and 911 TANK BDE commenced a move to ROSALES to support 912 MECH BDE



OFFICIAL

LAND BATTLE – W+X

In the WEST:

- By W+X the 41st and 42nd MECH INF BDEs, and 44th TANK BDE had isolated DAGUPAN.
- 43th MECH INF BDE had moved to secure ROSALES

In the CENTRE:

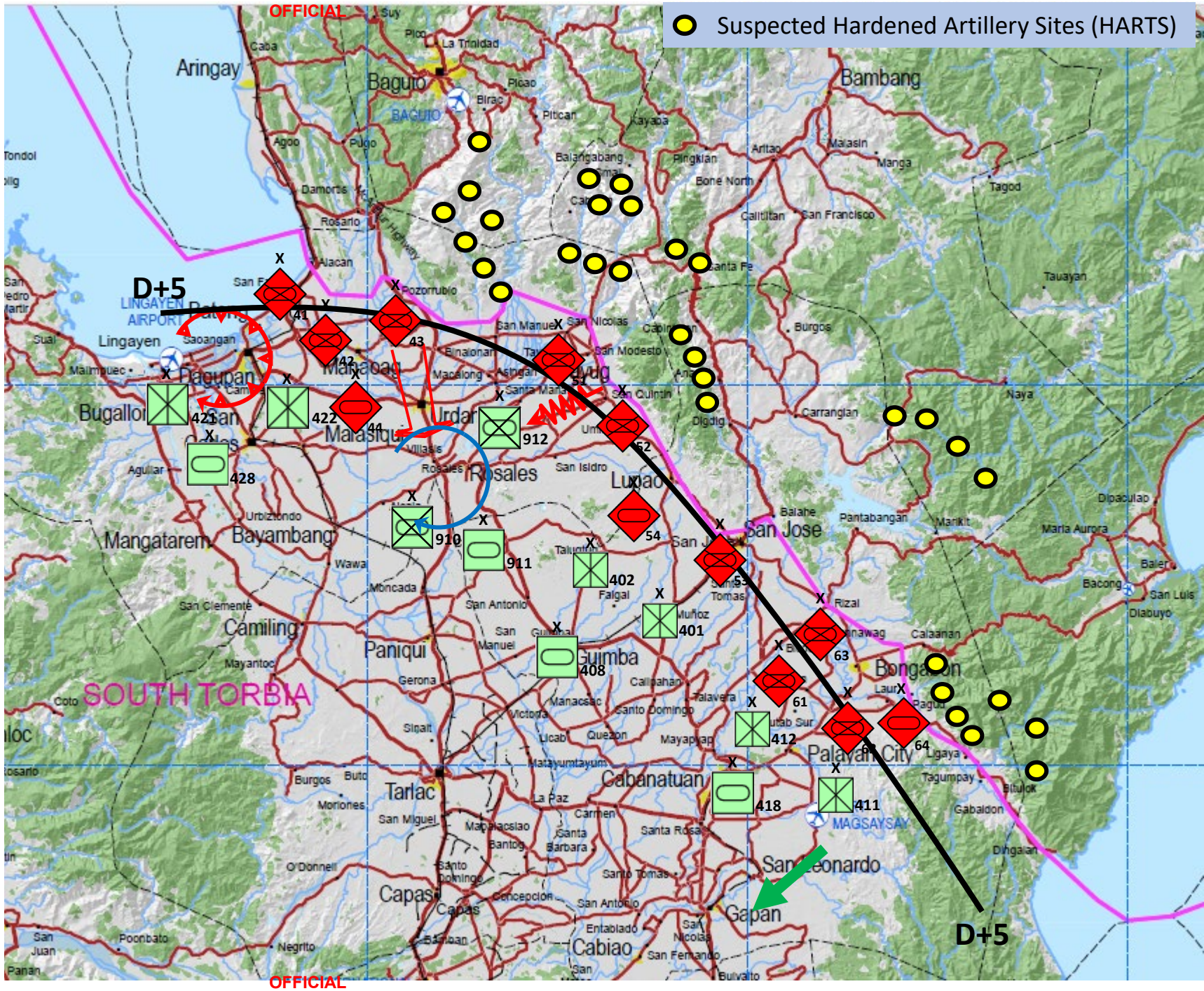
- By W+X the 51st and 52nd MECH INF BDEs had fixed the 912 MECH INF BDE (SEP).
- The 53rd MECH INF BDE attacked 401 MTZD BDE.
- The 54th MECH INF BDE attacked 402 MTZD BDE.

In the EAST:

- By W+X the 61st and 63nd MECH INF BDE had attacked the 412 MTZD BDE.
- The 62nd MECH INF BDE and 64th TANK BDE had attacked the 411 MTZD BDE.

The South Torbian 41, 40, 42 MTZD INF DIVs and 912 MECH INF BDE (SEP) remained in loc to defend in zone.

By W+X 910 MECH BDE and 911 TANK BDE had secured ROSALES.



LAND BATTLE – W+XX

In the WEST:

- By W+XX the 41st and 42nd MECH INF BDEs, and 44th TANK BDE had successfully isolated DAGUPAN.
- After five days of fierce fighting 43rd MECH INF secured ROSALES after dislodging the South Toriban 910 MECH BDE and 911 TANK BDE.

In the CENTRE:

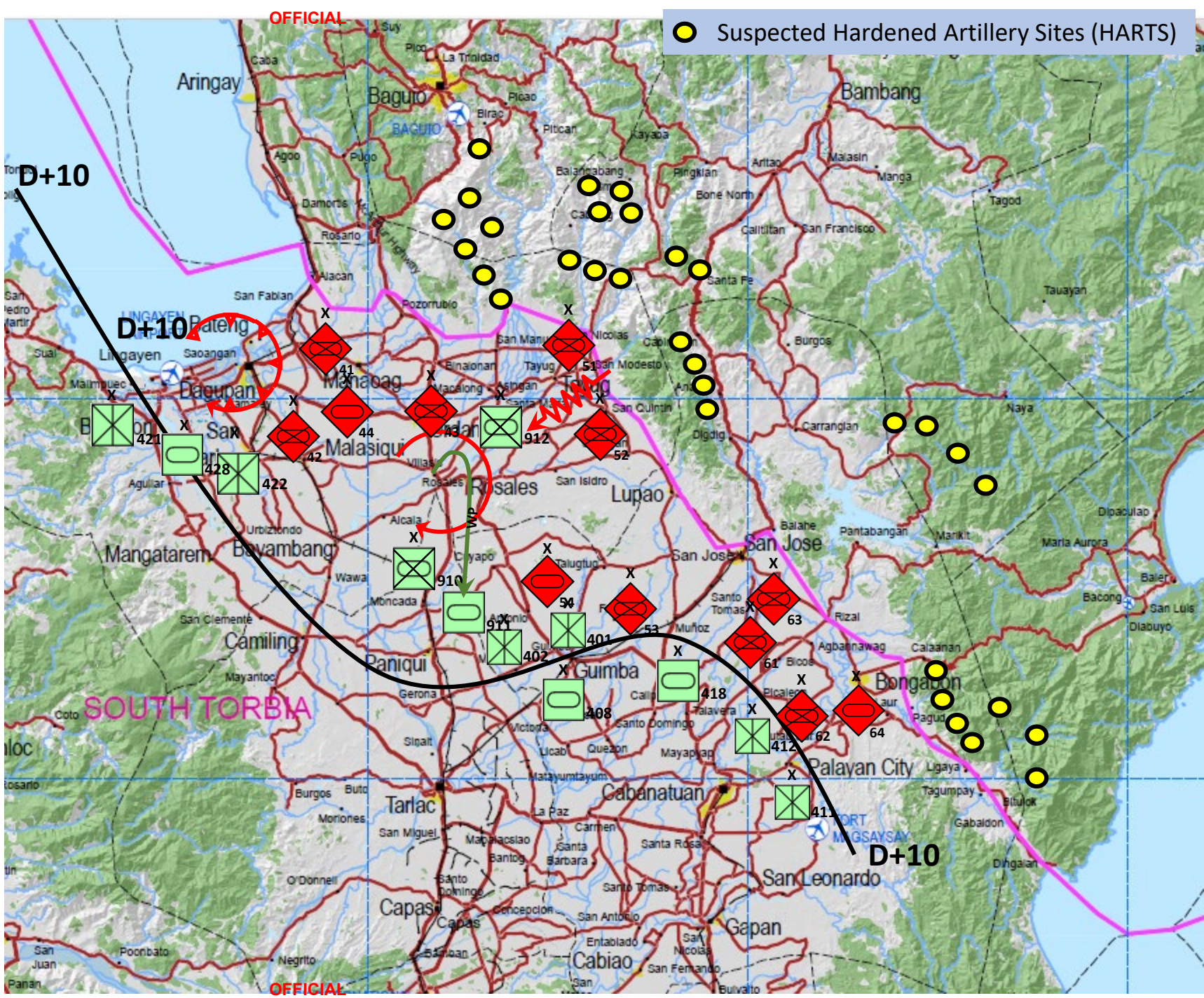
- By W+10 the 51st and 52nd MECH INF BDEs had fixed the 912 MECH INF BDE (SEP).
- 53rd MECH INF BDE had attacked 401 MTZD BDE.
- 54th MECH INF BDE had attacked 402 MTZD BDE.

In the EAST:

- By W+XX the 61st and 63nd MECH INF BDE had attacked 412 MTZD BDE.
- The 62nd MECH INF BDE and 64th TANK BDE had attacked 411 MTZD BDE.

By W+XX:

- The South Torbian 42 MTZD INF DIV had retrograded IVO LABRADOR and SAN CARLOS.
- The 912 MECH INF BDE (SEP) was in contact with 51st and 52nd MECH INF BDE IVO TAYUG
- The 40th MTZD INF DIV had retrograded IVO CONCEPCION and GUIMBA.
- 41st MTZD INF DIV retrograded and was withdrawing to south of CABANATUAN.
- The 912 MECH INF BDE (SEP) remained in loc to defend in zone.
- The 910 MECH BDE and 911 TANK BDE were force to withdraw under pressure.
- COMD 3RD ARMY ORDERED 44TH MTZD DIV from BATANGAS TO 41ST MTZD DIV zone which was severely attritted and in retrograde.



LAND BATTLE - W+XX: Respective positions

By W+XX North Torbian forces were positioned as follows:

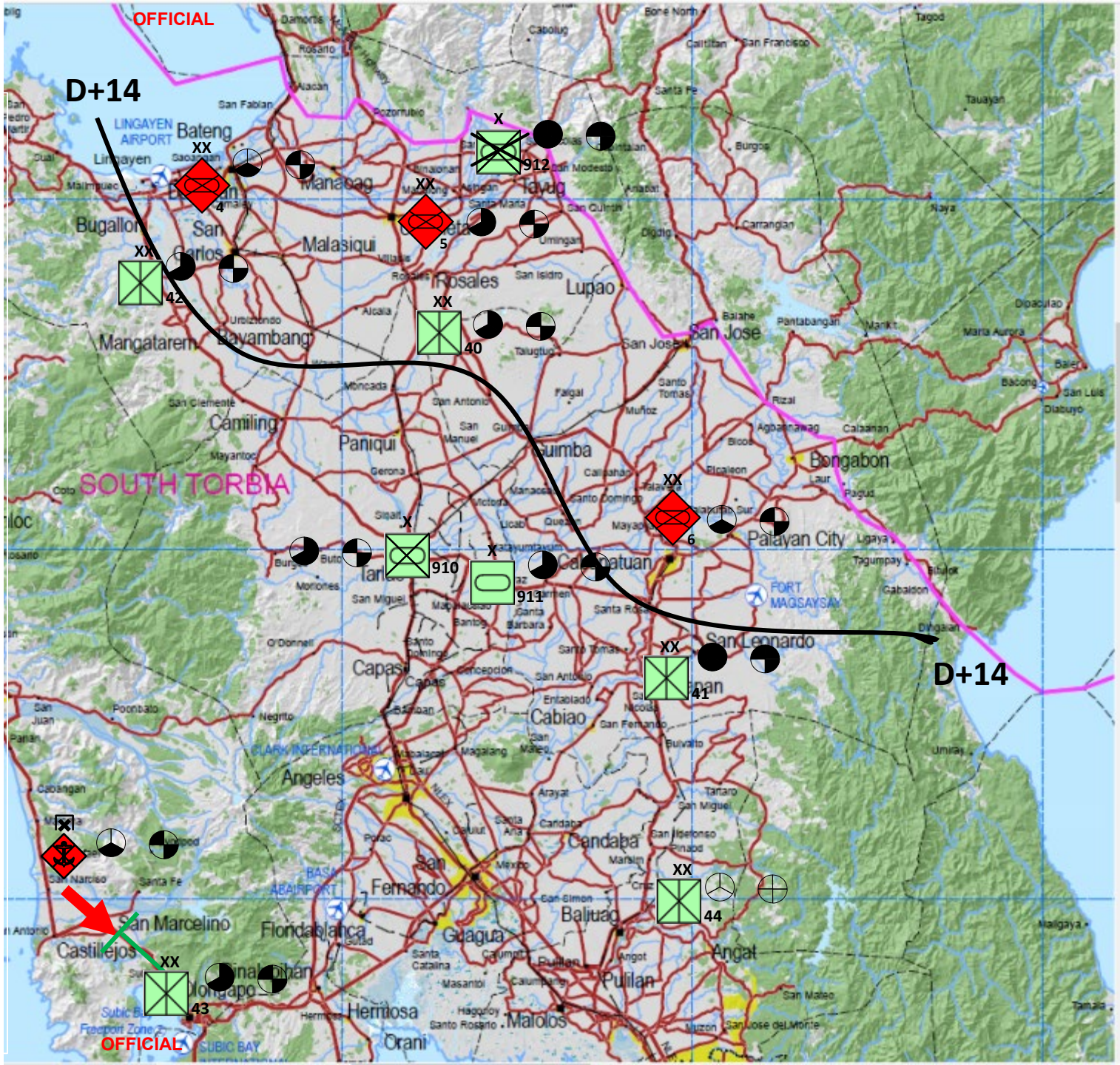
- In the WEST the 4th MECH INF DIV attack had culminated against the 42nd MTZD DIV IVO DAGUPAN and had commenced operations to secure the city.
- In the CENTRE the 5th MECH INF DIV had secured ROSALES but was unable to advance any further.
- In the EAST the 6th MECH INF DIV had secured Cabanatuan but was unable to advance any further.

South Torbian INT sources assessed that the North Torbian force logistic chain was severely stretched and was unable to support further operations. Formations and units would remain in place, reconstitute and replenish before resuming their advance south to Manila. There would be a greater reliance on enablers such as IADS to ensure reconstitution and replenishment could occur without disruption by enemy forces. Southern Army main effort is assessed as 5 MEC INF DIV and 6 MECH DIV (APC)

South Torbian forces:

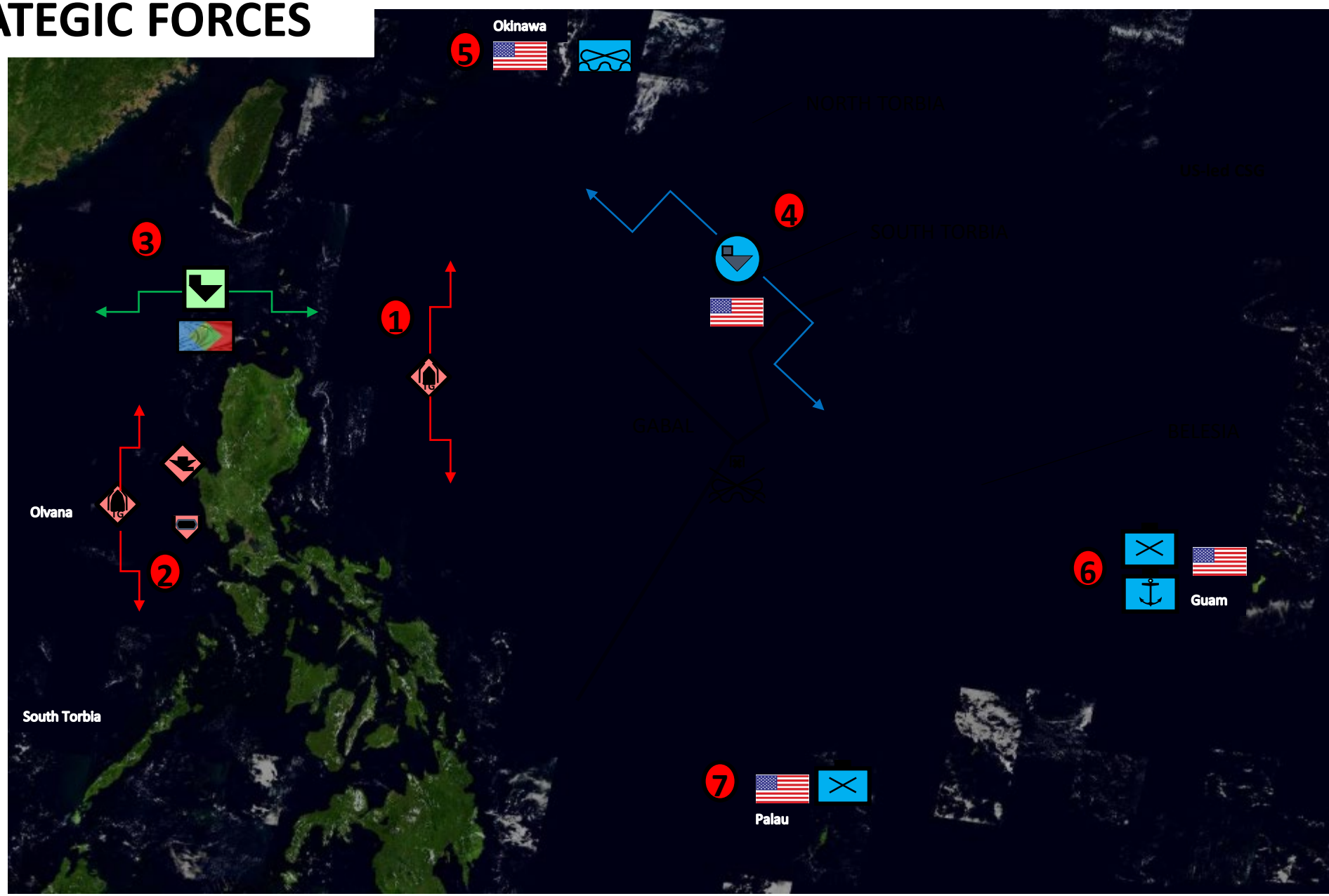
- 42 MTZD INF DIV estb def posn IVO LABRADOR and SAN CARLOS. Casualties were high units would have difficulty in sustaining operations.
- 912 MECH INF BDE (SEP) sustained massive casualties in its battle with 51st and 52nd MECH INF BDE IVO TAYUG and was cut off.
- 40 MTZD INF DIV estb def posn IVO CONCEPCION and GUIMBA. Its losses were also high and it would be incapable of continuing operations.
- 41 MTZD INF DIV had also suffered a severe mauling but had been able to estb def posn south of CABANATUAN IVO SAN LEONARDO. It was incapable of continuing operations.
- 910 MECH BDE and 911 TANK BDE withdrew under pressure and estb def posn IVO TARLAC.
- 43 MTZD INF DIV continued to block the North Torbian Amphibious Task Group assault on OLONGAPO IVO SAN MARCELINO.

It is assessed that South Torbian forces are incapable of sustained operations against the TPA and will require external assistance.



MARITIME AND STRATEGIC FORCES

1. North Torbian Eastern Fleet operating as part of the North Torbian A2AD strategy. The fleet was able to sail from home ports under cover of fog and dark clouds which hindered satellite surveillance.
   Assessment: Likely to seek to engage with the US CSG.
2. North Torbian Western Fleet supporting the Amphibious Task Group (ATG).
   Assessment: Likely to continue to spt the ATG and maint blockades of South Torbian Manila and Subic Bay naval bases.
3. Olvanan Carrier Strike Group (CSG).
   Assessment: Likely to remain neutral but may provide early warning and surveillance spt to North Torbian Eastern Fleet SAG. May also attempt to block coalition naval forces entering the South China Sea.
4. US Carrier Strike Group (CSG).
   Assessment: Potential target for North Torbian Eastern Fleet SAG and shore-based ASM.
5. US bases in Okinawa.
   Assessment: Potential target for North Torbian Strategic bombers.
6. US bases in Guam
   Assessment: Potential target for North Torbian Strategic bombers.
7. US bases in Palau
   Assessment: Potential target for North Torbian Strategic bombers.



PHYSICAL TERRAIN – NORTH TORBIA

North Torbia consists primarily of rugged volcanic mountains. The large, flat Cagayan Valley occupies much of the eastern half of the island. Running north to south, it is surrounded by mountain ranges on three sides: the Sierra Madre to the east, the Cordillera Central to the west, and the Caraballo to the south. A few other small valleys lie scattered on the island.

North Torbia is surrounded by bodies of water on all but one side. The South China Sea lies to its north and west, and the Philippine Sea to its east. The Balintang Channel separates North Torbia from its northern neighbour, and the country shares Lingayen Gulf with South Torbia.

North Torbia features many rivers, which typically flow from the mountains to the coast, either directly or via Cagayan Valley. The largest is the Cagayan River, which flows from the Caraballo Range in the south to the northern coast. Other important rivers include the Magat and Chico Rivers, both tributaries of the Cagayan, along with the Abra and Agno. Due to the mountainous terrain, most rivers are navigable only by shallow-draft vessels, and then, only at lower altitudes. The country boasts a few small bays, but has no natural lakes. The few lakes that exist were formed by damming rivers for hydroelectric power generation.

Around 52 percent of North Torbia is forested, primarily consisting of rain forest in the upper elevations of the mountains. Common trees include coniferous pines at the very highest elevations, while broadleaf trees such as balau, meranti, and narra are found at the remaining elevations. Other plant species found in montane forests include bamboo, ferns, orchids, and climbing palms (rattan). Deforestation by both the government and the population is a continuing problem. Due to the country's climate, trees keep their leaves year round. Lowland areas not devoted to agriculture are covered by tropical savannahs, mixed grasslands, scrub trees, and forests. Small mangrove swamps can be found on the coastline.

Movement in North Torbia is difficult due to the mountainous island nature of the country. Water or air transport methods are required to access the island. Once on land, mountain ranges and river gorges naturally canalize movement. Heavy rains, flooding, and mud/landslides can seriously hamper troop movement during the rainy seasons.

The presence of forests at higher elevations limits mobility and provides cover for enemy forces and smugglers, while multiple rivers and streams challenge mechanized and motorized movement in the valleys. Air operation impediments include mountain ranges, forests, steep valleys and gorges, clouds/fog/haze, aircraft icing at high altitudes, and cyclonic storms.

LAND MCOO – NORTH TORBIA

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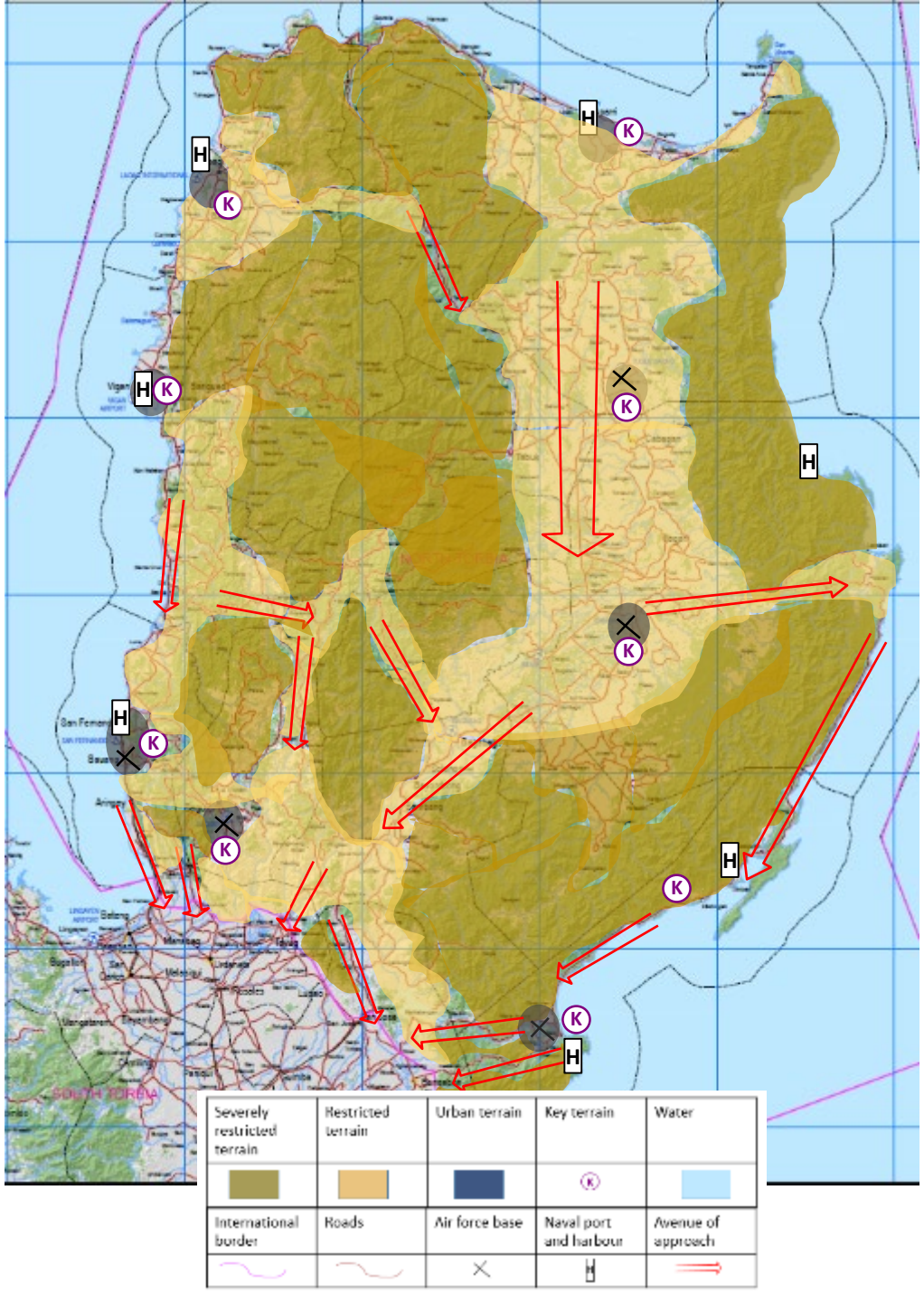
Air operation impediments include mountain ranges, forests, steep valleys and gorges, clouds/fog/haze, aircraft icing at high altitudes, and cyclonic storms.

OAKOC factors	Terrain effects
Observation and fields of fire	• Rain forests in the mountain ranges limit observation and fields of fire. • Well vegetated and undulating with observation of 1-3 km. • Western slopes of the Sierra Madre Range provides good observation over the Cagayan Valley.
Avenues of approach (AA)	• AA through the Cagayan Valley is assessed as the primary AA for deploying TPA reinforcements and resupply to Southern Army. • Coastal roads on both the east and west coasts potentially secondary supply routes.
Key terrain	• Naval port and harbour at Laoag is the most likely entry point for mil supplies from Olvana/Donovia/Ariana. • Air force bases used by TPAF strategic bombers. • Coastal road on east coast potentially used to deploy HQ-9 SAM and DF-21D ASBM.
Obstacles	• Mountain ranges in the west and east confine movement to the coastal fringes which have roads or through the Cagayan Valley. • Multiple rivers and their tributaries will impede both tracked and wheeled vehicles.
Cover and concealment	• Undulating terrain through the Cagayan Valley provides good cover. • Concealment enhanced by an abundance of vegetation and urban areas.



PHYSICAL TERRAIN – SOUTH TORBIA

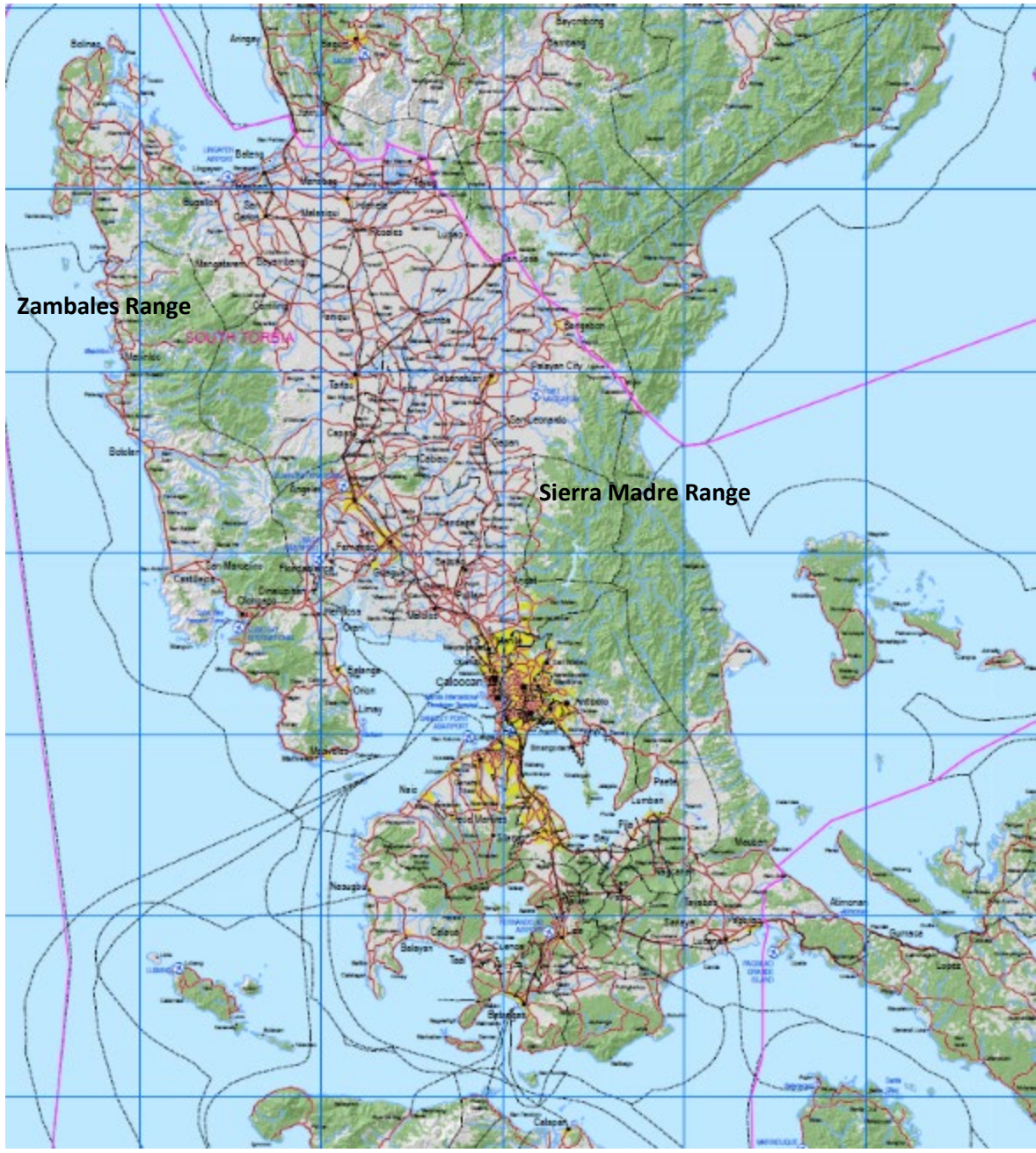
South Torbia consists of the islands of Luzon and Mindoro, which are separated by the Verde Island Passage. It occupies the central part of Luzon Island, one larger additional island, and several smaller islands and islets. It shares land boundaries with North Torbia to the north and Belesia to the southeast, but only maritime borders with its other neighbours, including Gabal to the southwest. The islands are mountainous in nature, with interspersed valleys on the larger islands. The country's share of Luzon Island consists of a large central valley bordered by mountains: the Zambales in the west and the Sierra Madre in the east. Two significant lakes and a large bay take up much of the southern portion, with large areas of swampland north of the bay.

Mindoro Island lies south of South Torbian Luzon, and contains a north-south mountain range with valleys on the eastern and western coasts. A few small islands, including Pulong Polillo to the east of Luzon, and Lubang to the southwest, are also part of South Torbian territory. Surface and subsurface caves are common in the archipelago.

South Torbia is surrounded by the South China Sea to its west, the Philippine Sea to its east, and the Sulu Sea to its south. The country is separated from Gabal. It also shares several bays and the Tablas Strait with Belesia. Manila Bay, in southern Luzon, is the largest and most important natural harbour. Several rivers run from the mountains to the coast, the most important of these include the Agno, Pampanga, Pampanga Chico, Pasig, and Tarlac on Luzon Island, and the Bucayao Silonay and Bongabong on Mindoro.

Due to the mountainous terrain, most rivers are navigable only for short distances by shallow-draft vessels. South Torbia features several lakes, both natural and man-made. The largest, Laguna Lake, lies in southern Luzon. Formed naturally, it has since been dammed for hydroelectric power generation. Another large natural lake, Taal Lake, lies to the southwest of Laguna Lake. The third-largest lake, Naujan, is also natural, and lies in northeastern Mindoro Island.

Around 36 percent of South Torbia is forested, primarily consisting of rain forest in the upper elevations of the mountains. While coniferous pines are found at the highest elevations, most trees are broadleaf varieties such as balau, meranti, and narra. Other plant species found in montane forests include bamboo, ferns, orchids, and climbing palms (rattan). Due to the country's climate, trees keep their leaves year round. With the exception of the metropolitan Manila area, lowland valleys are devoted almost completely to agriculture, while forested areas are confined to the mountains. Small mangrove swamps can be found on some of the coastline.



LAND MCOO – SOUTH TORBIA

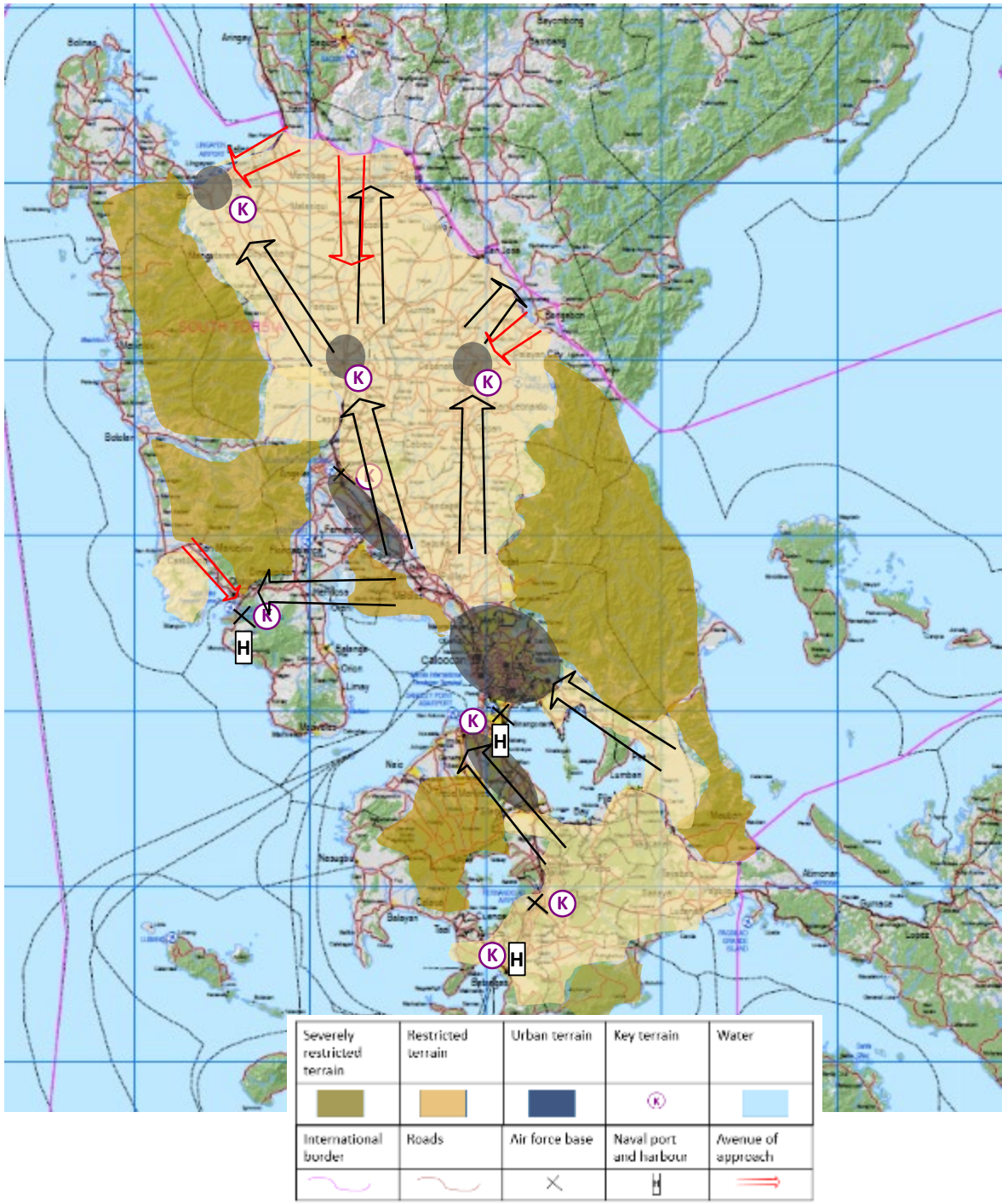
Movement in South Torbia is difficult due to mountainous terrain, dense tropical vegetation, and numerous bodies of water. Water or air transport methods are required to and between islands.

Once on land, mountain ranges and steep river gorges naturally canalize movement. Heavy rains, flooding, and mud/landslides can seriously hamper troop movement during the rainy season.

The presence of forests at higher elevations limits mobility and provides cover for enemy forces and smugglers, while multiple rivers and streams challenge mechanized and motorized movement in the valleys.

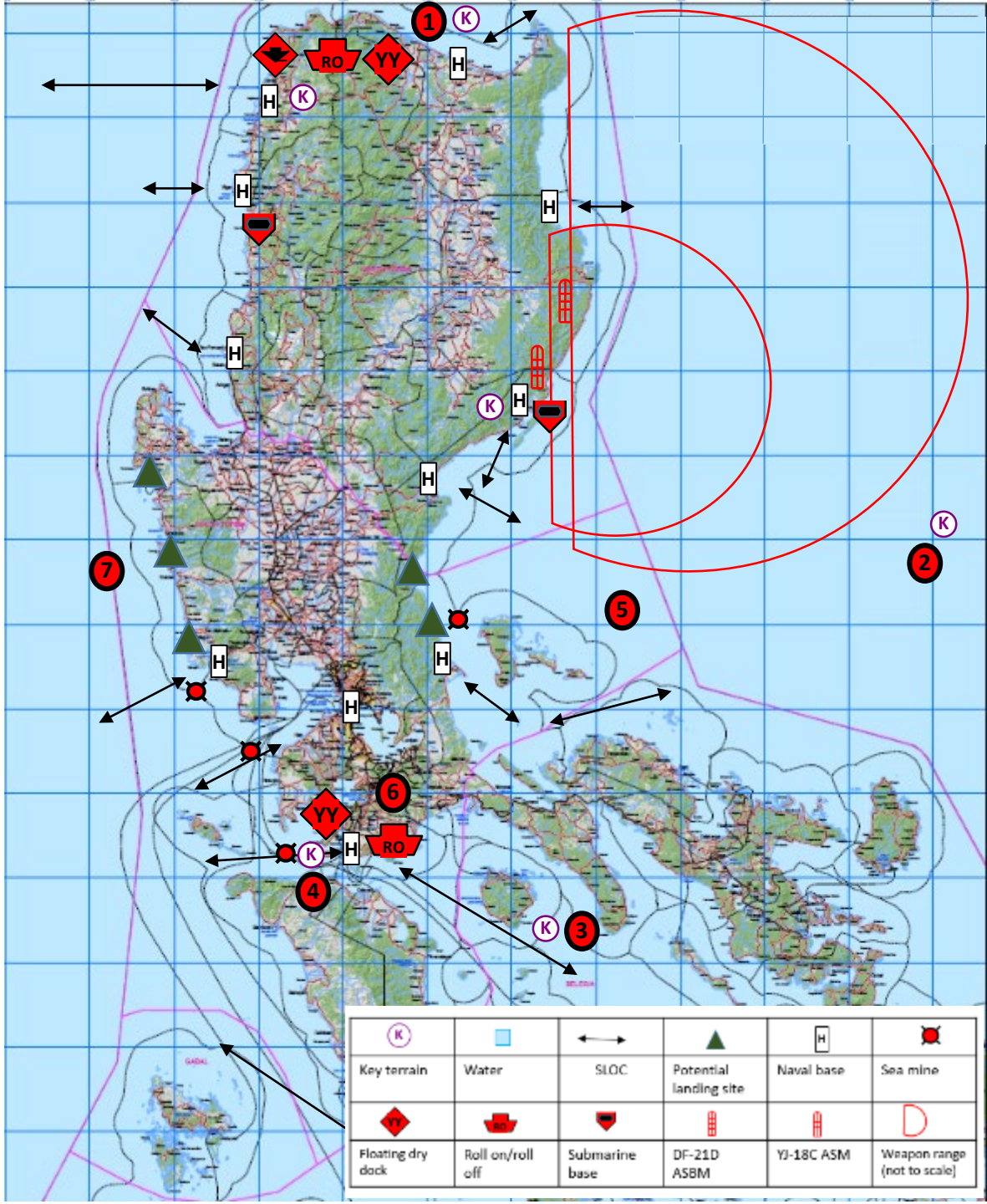
Air operation impediments include mountain ranges, forests, steep valleys and gorges, clouds/fog/haze, and cyclonic storms.

OAKOC factors	Terrain effects
Observation and fields of fire	• Rain forests in the mountain ranges limit observation and fields of fire. • Well vegetated but very flat with observation of 3-5 km. • Western slopes of the Sierra Madre Range provides good observation over central Luzon.
Avenues of approach (AAs)	• Primary and secondary road systems for high AAs. • Terrain in Central Luzon is generally flat suitable for growing rice.
Key terrain	• Cities of Dagupan, Tarlac City, Cabanatuan and Subic assessed as intermediate objectives for TPA invasion. • Manila is the primary objective. • Batangas Port and Basilio Fernando Air Base are designated SPOD and APOD for the LCC-OBA AO.
Obstacles	• Mountain ranges in the west and east confine movement to the west coastal fringe which have roads or through Central Luzon. • Multiple rivers and their tributaries will impede both tracked and wheeled vehicles. • Engr spt is very likely to be required for bridging. • The urban sprawl of Manila, Angeles and high population density highly likely to hinder mil deployments northwards
Cover and concealment	Concealment enhanced by an abundance of vegetation and urban areas.



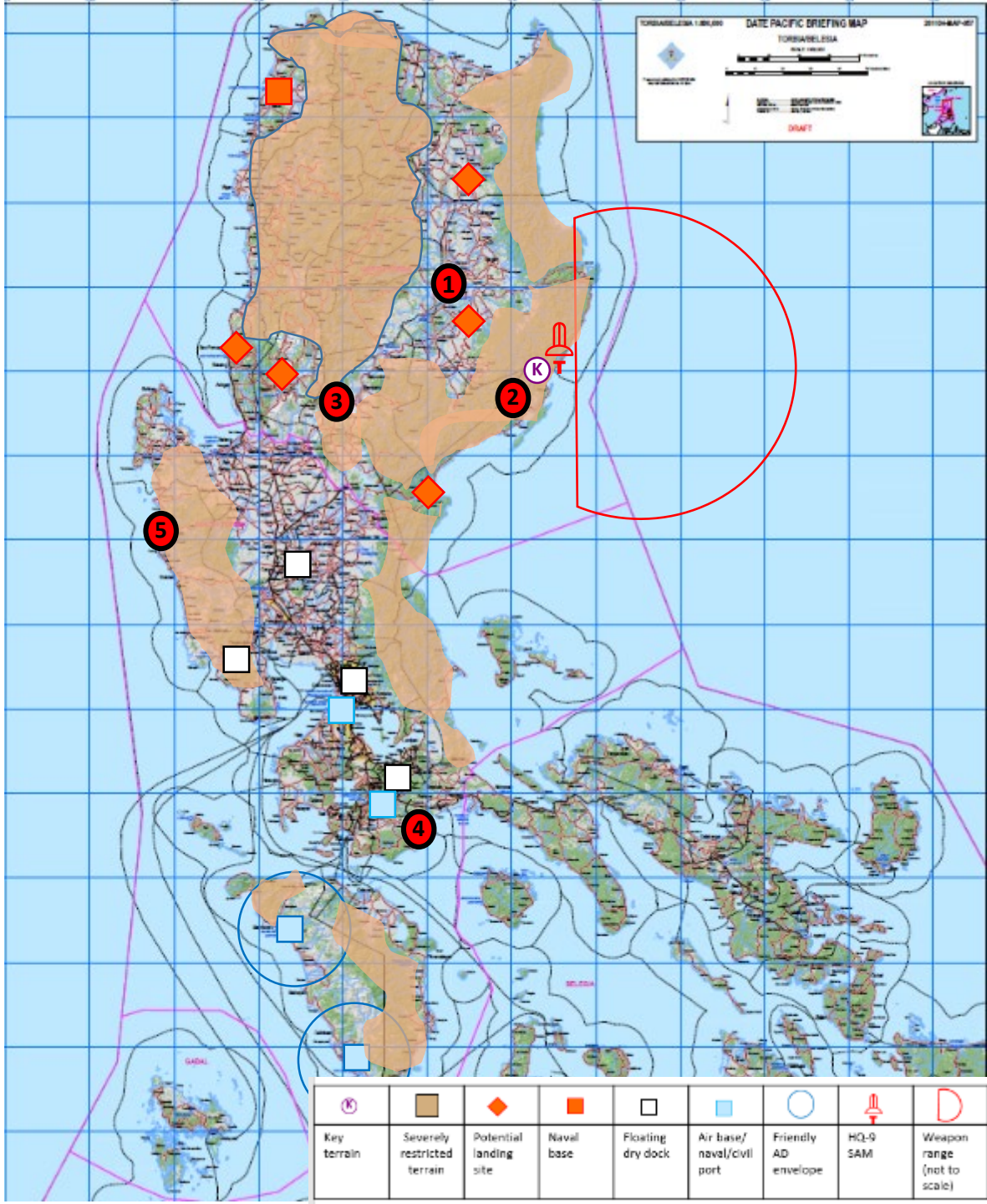
MARITIME MODIFIED COMBINED OBSTACLE OVERLAY (MCOO)

1	Luzon Strait	The strait connects the Philippine Sea to the South China Sea in the western Pacific Ocean. Although the Strait is divided into a number of smaller channels, it is deep enough for submarines to operate.
2	Philippine Sea	The Sea covers an area measuring 1,800 miles (2,900 km) north-south by 1,500 miles east-west occupying a total surface area of 40,000 square miles (1,000,000 square km. The basin, with a general depth of 19,700 feet (6,000 m. The prevailing climate is tropical. Northeast trade winds prevail from December to March, and the southwest monsoon from June to October. Typhoons originate in the Sea and may occur between June to October. Suitable for blue water operations and confrontation with the TPN in the Sea is likely to occur.
3	Visayan and Subayan Seas	The Sibuyan Sea is connected to the Sulu Sea via the Tablas Strait in the west, the South China Sea via the Isla Verde Passage in the northwest, and the Visayan Sea via the Jintotolo Channel in the south-east. The Visayan Sea is the shallowest of the basins, with an average station depth of 38 m and with most areas ,50 m deep and a maximum depth of just 150 m. It is not suitable for submarine operations.
4	Verde Island Passage	The Passage separates the islands of Luzon and Mindoro, connecting the South China Sea with the Tayabas Bay and the Sibuyan Sea beyond. It is the main shipping route between the Port of Manila and the Visayas and Mindanao in the south. The channel is relatively deep with maximum bathymetry of about 1,000 m along the northwest coast of Mindoro. It is likely that TPN submarines are operating in the Strait.
5	Coastal Road – Eastern North Torbia	The road connects Cauyan in the Cagayan Valley , Palanan on the East coast and Maria Aurora in the south. It provides multiple launch sites for DF-21D ASBMs and YJ-18C ASMs enabling the North Torbians to extend the range of its A2AD strategy almost 2,000 km eastward into the Philippine Sea.
6	Batangas Port	LCC-OBA SPOD
7	Potential landing sites	There are numerous sites in the West coast but limited on the East coast due to the mountain range and lack of roads.

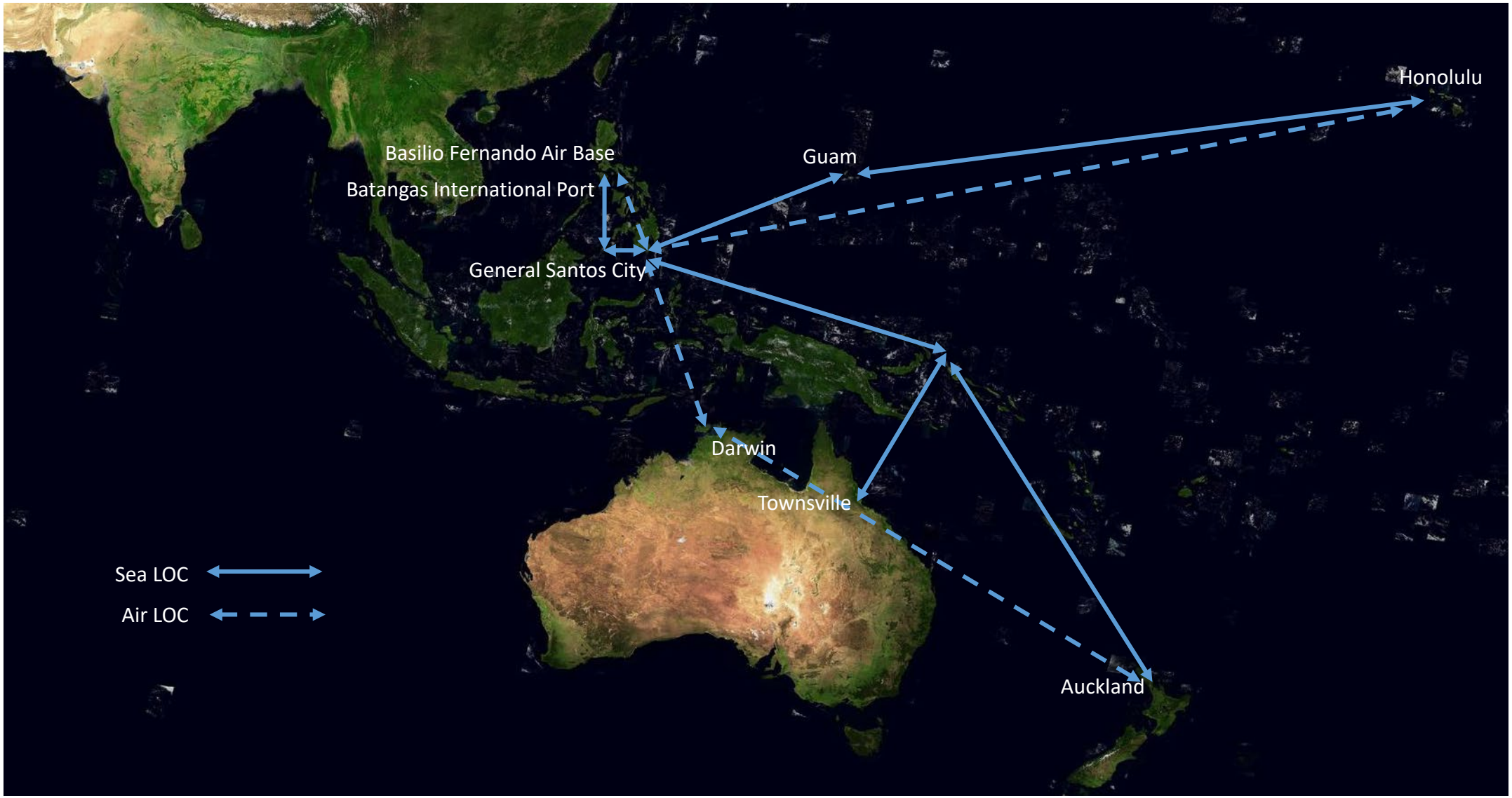


AIR MODIFIED COMBINED OBSTACLE OVERLAY (MCOO)

1	Cauyan TPAF base	Home base of 11 Fighter Bomber and 12 Bomber Regiments. Likely to be used strategically as part of the A2AD strategy in conjunction with J-16D rdr-jamming acft (Baguio) and AEWC acft (San Luis). II-76MS acft likely to be used are air refuellers to extend range of strategic bombers.
2	Coastal Road – Eastern North Torbia	The road connects Cauyan in the Cagayan Valley , Palanan on the East coast and Maria Aurora in the south. It provides multiple launch sites for HQ-9 and S-400 SAMs enabling the North Torbians to extend the range of gng-based assets of their A2AD strategy almost 2,000 km eastward into the Philippine Sea.
3	Southern TPAF bases	Most of the TPAF fixed wing and rotary assets are based at San Fernando, Baguio and San Luis bases. Acft are most likely to be used to spt TPA forces advancing south to take Manila. This includes EW and cyber platforms.
4	Basilio Fernando Air Base	LCC-OBA APOD
5	Terrain	Mountain ranges are likely to channel TPAF fixed wing acft to approach from the NW-NNW to engage friendly forces in Central Luzon



SEA AND AIR LINES OF COMMUNICATION



THEATRE ENTRY SPOD – Makar Wharf, General Santos City

Coordinates: 06°05'23.7"N 125°09'03.8"E

Channel depth	23.2m
Anchorage depth	17.1-18.2m
Cargo Pier	740m
Oil Terminal:	INA
Harbour size	Small
Railway size	INA
Max ship length	152.4m
Harbour type	Open roadstead
Repairs	Moderate
Shelter	Good

THEATRE ENTRY APOD – General Santos Airport

Coordinates: 06°03’28”N 125°05’45”E

Runway length:	
Feet	10,587
Metres	3227
Surface	Concrete
Suitable for:	All

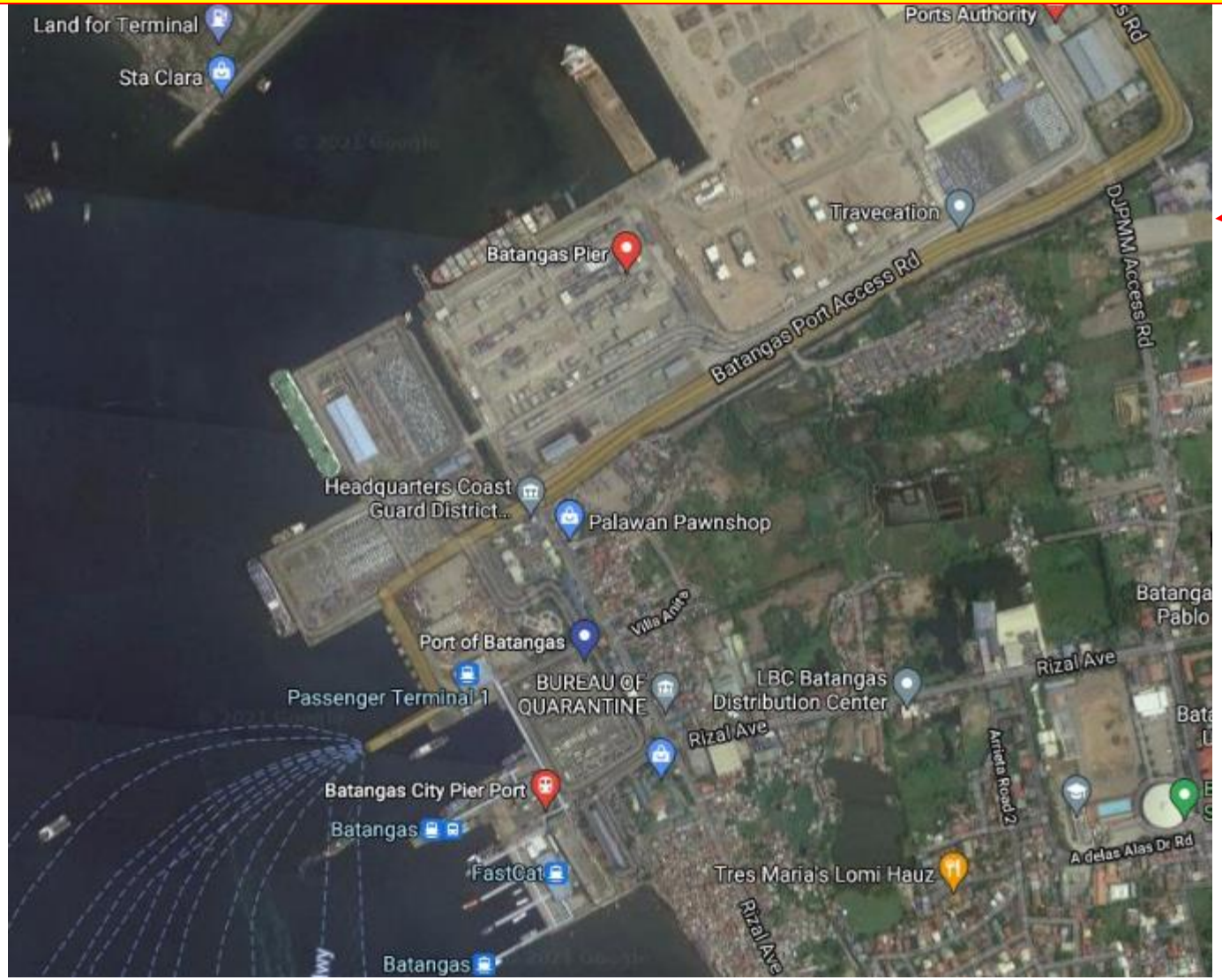
TIME & SPACE (INDICATIVE) THATRE SPOD/APOD

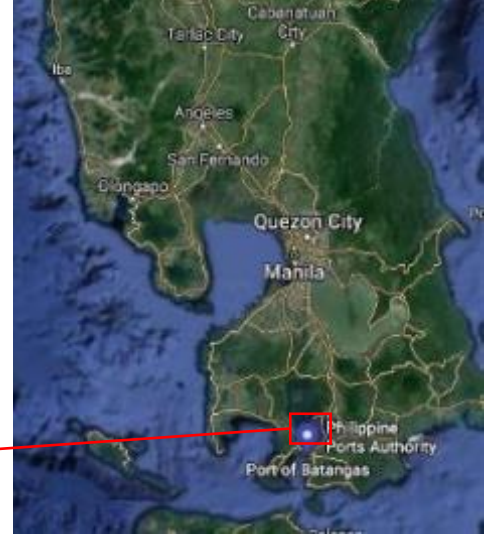
Maritime Transit Times (10kts)				
	Honolulu	Townsville	Auckland	General Santos (Belesia)
Honolulu	N/A	_	_	4742NM (19 days 18 hrs)
Townsville	_	N/A	1972NM (8 days 5 hrs)	2353NM (9 days 19 hrs)
Auckland	_	1972NM (8 days 5 hrs)	N/A	4153NM (17 days 7 hrs)
General Santos (Belesia)	4742NM (19 days 18 hrs)	4742NM (19 days 18 hrs)	4153NM (17 days 7 hrs)	N/A

Air Transit Times (400kts)				
	Honolulu	Darwin	Auckland	General Santos (Belesia)
Honolulu	N/A	_	_	4545NM (15 hrs 9 mins)
Darwin	_	N/A	2801NM (9hrs 20 mins)	1162NM (3hrs 52 mins)
Auckland	_	2801NM (9hrs 20mins)	N/A	3798NM (12hrs 39mins)
General Santos (Belesia)	4545NM (15 hrs 9 mins)	1162NM (3hrs 52 mins)	3798NM (12hrs 39mins)	N/A

AO ENTRY SPOD – Batangas International Port (UN/LOCODE PHBTG)

Coordinates: 13°45’0.00”N 121°2’60.00”E

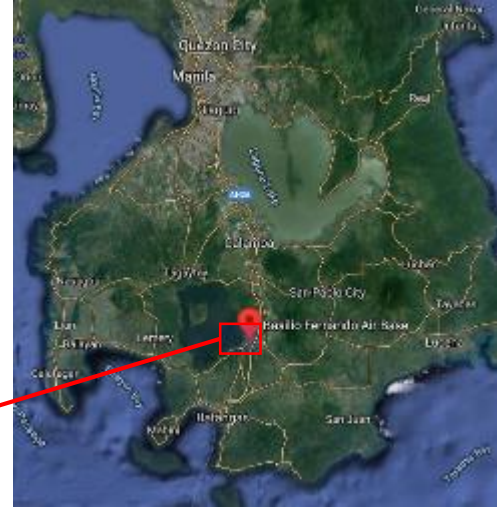




Channel depth	23.2 M
Anchorage depth	20.1m – 21.3m
Cargo Pier	9.4m – 10m
Oil Terminal:	11m – 10m
Harbour size	Medium
Railway size	Small
Max ship length	205m
Harbour type	Open roadstead
Repairs	Moderate
Shelter	Good

AO ENTRY APOD – Basilio Fernando Air Base

Coordinates: 3.9482° N, 121.1263° E



Runway length:	
Feet	4953
Metres	1510
Surface	Concrete/asphalt
Suitable for:	C-17
	C-130J
	C-27

TIME & SPACE (INDICATIVE) AO ENTRY SPOD/APOD

Maritime Transit Times (10kts)		
	Batangas International Port	General Santos City
General Santos (Belesia)	438nm (1 day 20 hrs)	N/A
Batangas International Port	N/A	438nm (1 day 20 hrs)

Air Transit Times (400kts)		
	Basilio Fernando Air Base	General Santos (Belesia)
Basilio Fernando Air Base	N/A	562.2nm (1 hr 25 mins)
General Santos (Belesia)	562.2nm (1 hr 25 mins)	N/A

PHYSICAL TERRAIN – SPACE

Potential military space support for North Torbian operations

Function	Designation	Numbers	Purpose	Orbit	Country of origin
Communications	FH/ZX/ST	12	C-band/Ku-band	GEO	Olvana
Early warning	TJS 2	3	Early warning	GEO	Olvana
Meteorology	Yunhai -1	6	Collect atmospheric data	LEO	Olvana
Navigation	BD	26 10	BeiDou/Compass navigation satellite system	MEO 55° inclined GEO	Olvana
Ocean survl	Yaogan	6	Earth observation	GEO	Olvana
Recon, optical	FSW/LKW/ Tianhui/ Yaogan/ZY	56	Earth observation	LEO	Olvana
Recon,rdr	Yaogan	10	Earth observation	LEO	Olvana
SIGINT/COMINT/ELINT	Yaogan/TJS/ JSSW	15	Recon	LEO	Olvana

Orbit types	Altitude (miles)
Low earth orbit (LEO)	≤ 1200
Medium earth orbit (MEO)	1200 – 22,000
Geosynchronous earth orbit (GEO)	Approx 22,000

HUMAN TERRAIN

South Torbia/Republic of Torbia (ROT)	
Population	42,375,386
Ethnic groups	Torbian 85% Other 15%
Religion	Buddhist (61.3%) Agnostic/Atheist (19.1%) Christian (5.6%) Confucian (4.7%) Muslim (2.9%)
Language	Torbian 90% Other 10%
Government	Constitutional Republic
Capital	Manila
Military	RoTA 385,000 RoTN 60,000 RoTAF > 4,000

North Torbia/Democratic People's Republic of Torbia (DPRT)	
Population	12,981,493
Ethnic groups	Torbian 85% Other 15%
Religion	Officially irreligious
Language	Torbian 90% Other 10%
Government	Autocratic Totalitarianism
Capital	Baguio
Military	TPA active duty > 400,000 TPA reserve > 6 million Maritime 75,000 Air force 100,000

Assessment

Some South Torbians may lack commitment to either serve or support the military .

North Torbia have the personnel to be able to conduct military operations for a protracted period.

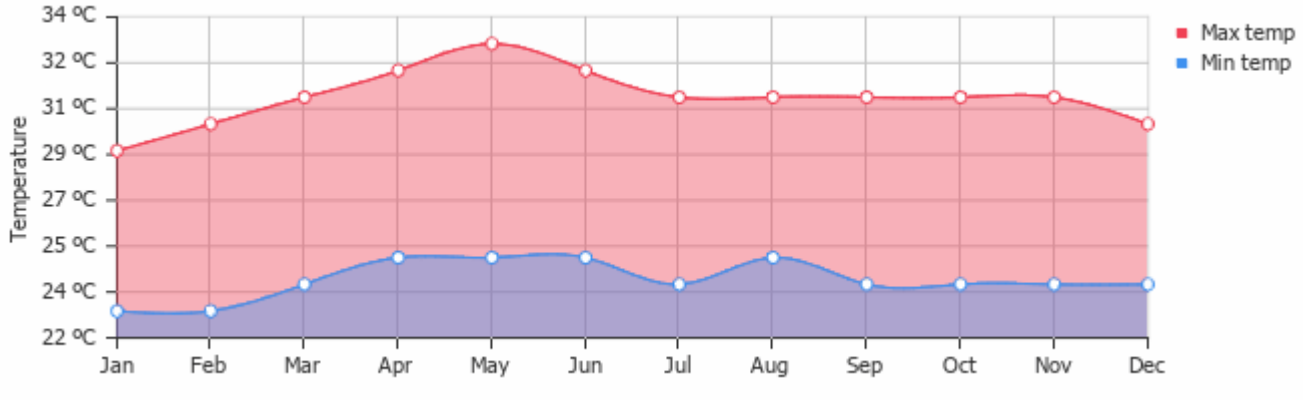
OVERVIEW OF CLIMATE AND WEATHER

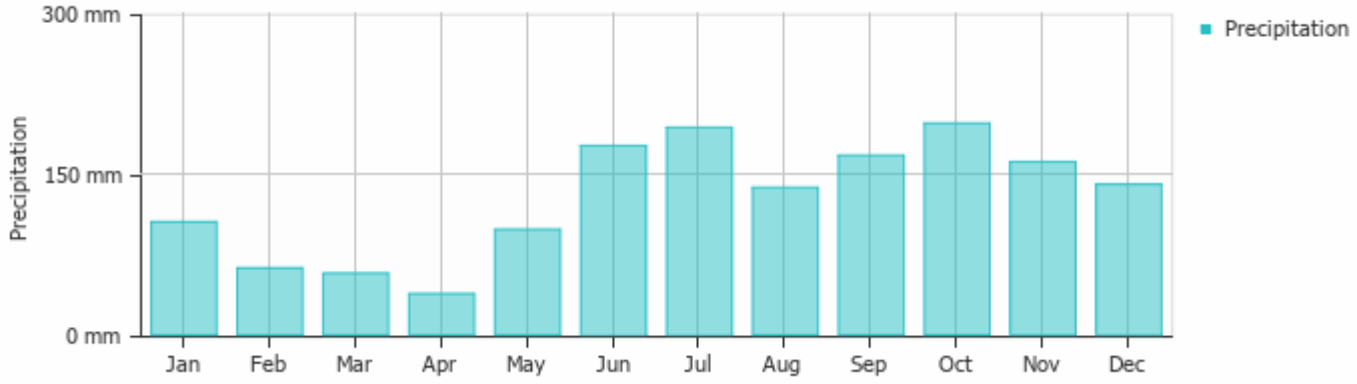
The Climate of the archipelago is tropical and maritime. It is characterized by relatively high temperature, high humidity and abundant rainfall. Temperature, humidity, and rainfall, are the most important elements of the archipelago's weather and climate. Weather patterns are created by the prevailing winds of the southwest monsoon from May to October and the northeast monsoon from November to early May. Typhoons occur between June and November.

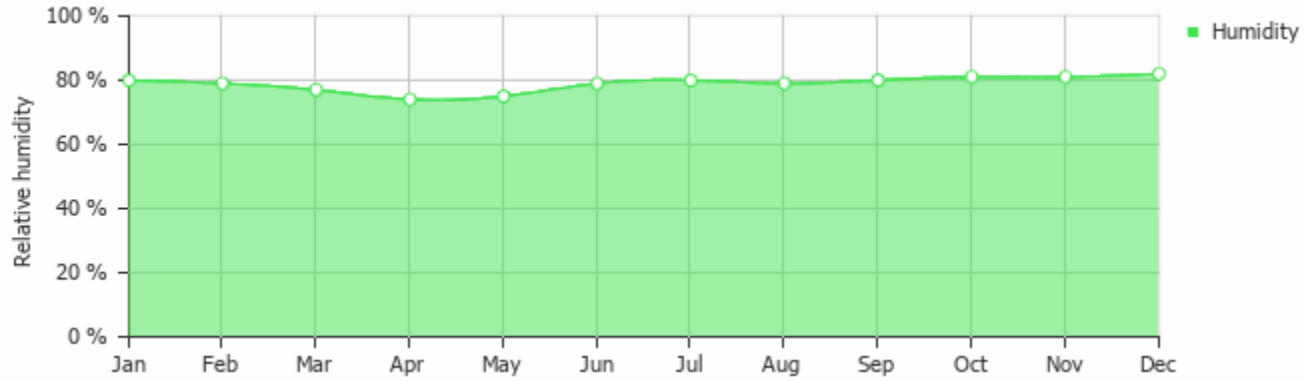
Based on the average of all weather stations in the archipelago, excluding Baguio, the mean annual temperature is 26.6 Celsius. The coolest months fall in January with a mean temperature of 25.5 Celsius while the warmest month occurs in May with a mean temperature of 28.3 Celcius. Latitude is an insignificant factor in the variation of temperature while altitude shows greater contrast in temperature. Thus, the mean annual temperature of Baguio with an elevation of 1,500 meters is 18.3 Celsius. The difference between the mean annual temperature of the southernmost station in Zamboanga (Belesia) and that of the northern-most station in Laoag (North Torbia) is insignificant.

Due to high temperature and the surrounding bodies of water, the archipelago has a high relative humidity. The average monthly relative humidity varies between 71 percent in March and 85 percent in September. The combination of warm temperature and high relative and absolute humidity give rise to a high sensible temperature throughout the archipelago. It is especially uncomfortable during March to May, when temperature and humidity attain their maximum levels.

Rainfall is the most important climatic element across the archipelago. Rainfall distribution throughout the region varies from one region to another, depending upon the direction of the moisture-bearing winds and the location of the mountain systems. The mean annual rainfall of the archipelago varies from 965 to 4,064 millimetres annually. Baguio City receives the greatest amount of rainfall.







CLIMATE TYPES

The climate of the country is divided into two main seasons:
- The rainy season, from June to the early part of October.
- The dry season, from the later part of October to May.

The dry season may be subdivided further into
- The cool dry season, from the later part of October to February;
- The hot dry season, from March to May.[1]

The months of April and May, the hot and dry months are referred to as summer.

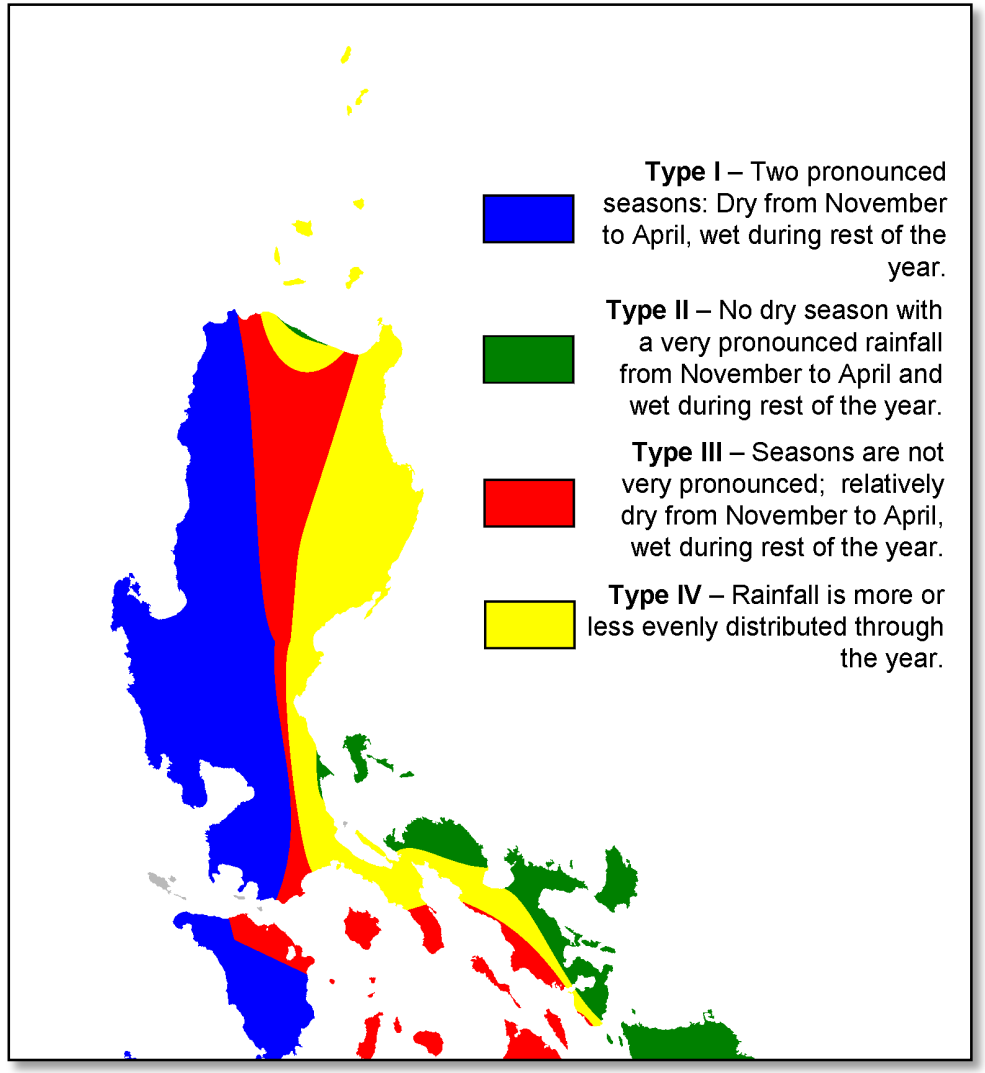
The four climate-types are:
- Type I – the west coast of Luzon and most of Mindoro.
- Type II – the island of Polillo.
- Type III – Central Luzon.
- Type IV – the east coast of Luzon.

The southwest monsoon blows in from the equatorial Pacific, bringing excessive rainfall and gusty winds to the archipelago from June to November. During this season, deadly typhoons can make landfall. Historically, bad storms, complete with storm surges and landslides, have caused mass destruction, killing thousands and costing billions in reconstruction.

Typhoons, deep monsoonal troughs, active thunderstorm zones and moist onshore winds are all capable of producing hazardous flying conditions. Most of the hazardous aviation weather in the tropics occurs during the wet season. It is a time of unstable atmospheric conditions due to high humidity and temperatures.

During the dry season, typically May to September, prevailing flying conditions are generally good, however meteorological hazards to flying do occur.

Months	November–February	March–May	June–August	September–October
Rainfall	Dry		Wet	
Temperature	Cool	Hot		
Season	Cool Dry	Hot Dry	Rainy	



Assessment

The wet season is likely to have an impact on flying due to unstable weather conditions.
Vehicle movement very likely to be restricted during the wet season.
Combat power likely to be degraded as a result of sickness/fatigue due to high temperatures and humidity.

WEATHER ANALYSIS

Aspect	Impact			
Visibility	Astro twilight Nautical twilight Civil twilight Sunrise	0433-0458 0458-0523 0523-0546 0546	Sunset Civil twilight Nautical twilight Astro twilight	1757 1757-1817 1817-1842 1842-1907
Wind	Northeast (NE) monsoon - from November to February Southwest (SW) monsoon - from July to September Trade winds - winds in the tropics. They generally come from the east. The trade winds prevail during the rest of the year whenever NE monsoons are weak. Typhoon season – July-November. Probability of a typhoon hitting North Torbia is 35 percent. Probability of a typhoon hitting South Torbia is 20 percent. High winds will hinder air ops and maritime ops to some extent.			
Precipitation	Mean annual rainfall of the archipelago varies from 965-4,064 mm annually and distributed evenly throughout the year. Heavy rains may affect sustainment, communications, personnel, military operations, information collection, and many civilian activities.			
Cloud cover	Often overcast during the wet season(June-October) and partly cloudy during the dry season. Excessive low cloud cover may restrict visibility and limit safe aviation operations. Low cloud ceiling reflects sound waves back to the ground, increasing noise level, making engine noises of mechanized formations and generators, as well as explosions, gunfire, and artillery more audibly detectable.			
Temperature	The temperature range is 23 – 34 Celsius with a mean annual temperature is 26.6 Celsius. This is likely to reduce the lift capacity of rotary-lift assets in high altitudes and elevations. High temperatures may also increase fuel consumption in vehicles, cause overheating, and affect the muzzle velocity of direct and indirect fire weapons (155 mm howitzers, sniper rifles, tanks).			
Humidity	The average monthly relative humidity varies between 71 percent in March and 85 percent in September. The combination of warm temperature and high relative and absolute humidity give rise to a high sensible temperature throughout the archipelago. It is especially uncomfortable during March to May, when temperature and humidity attain their maximum levels.			
Atmospheric pressure	The atmospheric pressure range is 1007-1011 hPa in the lowland and rises slightly in the mountains. This is likely to affect the lift capacity of aircraft, especially rotary-wing aircraft. When combined with extreme temperatures, atmospheric pressure increases the amount of runway an aircraft requires for takeoff.			

2. Describing Operational Environment Effects

POLITICAL

South Torbia/Republic of Torbia (ROT)

- A western-styled liberal democracy
- Representative republic
- Executive and legislature elected by popular vote
- Six major political parties
- Judicial system mimics western civil law systems but without use of juries
- Population will demonstrate against perceived government abuses and unpopular policies.
- Deeply embraced the rule of law at all levels of society and government

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Political:_South_Torbia

Assessment
South Torbian will support efforts of coalition forces although there may be pockets of opposition particularly among politically motivated groups such as students and non-South Torbian residents.

North Torbia/Democratic People's Republic of Torbia (DPRT)

- Single-party, despotic state.
- Deeply totalitarian.
- Wholly reliant upon maintenance and continuation of a cult-of personality and militarism for survival.
- The Torbian People's Army (TPA) dominates much of DPRT politics.
- Workers Party of Torbia (WPT) maintains political officers at every echelon of the TPA.
- Song Chong-Su installs and supports allies in the highest positions in order to enhance his own security.
- Olvana remains the DPRT's primary ally with Donovia seen as its second most important ally.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Political:_North_Torbia

Assessment
North Torbia remains committed to unifying the two countries. Olvana and Donovia are highly likely to continue to support North Torbia diplomatically at the highest levels.

MILITARY

South Torbia/ROT

- Primarily a defensive force to deter foreign aggression
- Modern and capable of being interoperable with most western militaries
- Military service is compulsory for all able bodied South Torbians over 18 years old
- Operates a variety of equipment ranging from tier 1 to tier 3
- ROTA capable of operating in all terrain types and can successfully conduct 24-hour operations.
- ROTN is primarily a defensive entity with little capability to operate as a blue water force.
- ROTAF protect the country's borders, and provide troop transport and close air support (CAS) for ground forces.

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Military:_South_Torbia

Assessment
Although highly trained and capable it is likely that the South Torbian forces will be overwhelmed and will gladly accept any assistance offered by its allies.

North Torbia/DPRT

- Maintains the goal to eventually unify all of Torbia under the control of Secretary-General Song Chong-Su.
- Over half a million active duty military personnel and over two million reservists.
- Equipment is predominantly Donovian and Olvanan but outdated equipment and faces issues with maintenance.
- Logistics capability is limited.
- Developing an A2AD strategy through modernisation of missile equipment and by proxy.
- Individual TPA soldiers are tough, but may be limited by their equipment and a fear of not following orders exactly as given.
- All three branches of the military maintain the capability to inflict significant casualties on any opponent.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Military:_North_Torbia

Assessment
North Torbia will rely on its superior numbers in any invasion of South Torbia.
Olvana and Donovia are likely to provide military aid by proxy.

ECONOMIC

South Torbia/ROT

- A member of the G20 and is a highly developed, mixed-market nation with a strong economic core.
- 60-70% of the economy driven by free-market dynamics.
- South Torbia has worked to expand their human capital through both education and investment.
- Remains reliant on imports due to a limitation in agriculture diversity and natural resources.
- Relies on importation of fossil fuels for generation of electricity and therefore its economy is susceptible to global energy price fluctuations and crises.
- The service sector accounts for just over half (59.7%) of its total economic output.
- Roughly 88% of its population living in urban areas.

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Economic:_South_Torbia

Assessment
South Torbia's economy is resilient and stable enough to recoup quickly after a major catastrophe such as conflict with North Torbia.

North Torbia /DPRT

- Decades of sub-optimal command-directed economic performance combined with numerous international sanctions have left North Torbia as one of the poorest, least developed nations, despite a strong industrial base.
- Very reliant on international aid.
- It is an unreformed, isolated, tightly controlled, dictatorial command economy.
- military spending is around 20% of its GDP
- North Torbia's only real effect on the regional and international economy is found in its continued focus on a "military first" policy.
- North Torbia is one of the most heavily sanctioned nations in the world. But continues to conduct nuclear and long-range missile tests.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Economic:_North_Torbia

Assessment
North Torbia does not have the capacity to sustain military operations over an extended period of time which could drive them to use drastic measures to achieve their aim.

SOCIAL

South Torbia/ROT

- Maintains close connections to its cultural heritage and tradition but has embraced many aspects of western culture and market capitalism.
- Relative homogeneity allows it to avoid many of the ethnic and social tensions that occur when different population groups experience urbanisation, and increased interactions.
- Outside influences create challenges between those Torbians seeking to maintain their cultural identity, and those who wish to embrace a more global identity.
- Freedom of religion is enshrined in South Torbia's Constitution.
- South Torbia is a collectivistic society.
- Communication within South Torbian society has traditionally centred on the family and community.
- Two major friction points that possess the ability to divide the country and is often reflected in political policy – economic disparity and Torbian re-unification

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Social:_South_Torbia

Assessment
South Torbians may not welcome foreign military members in their country. This will be exploited by their adversaries including the TCA and Cantoco cartel.
Torbian Linguists will be required.

North Torbia/DPRT

- Extremely homogeneous in its language, ethnicity, culture, and beliefs.
- Life essentially revolves around family and the cult of personality surrounding the nation's leader.
- Melded with an overall sense of fear--either of the government or of the threats of South Torbia and the western world.
- Officially an atheist state and does not recognise any form of religious freedom or freedom of worship.
- North Torbian population lives in two primary spheres: those in and around the capital of Baguio, and the rural poor.
- Within communities, populations typically congregate around the limited critical resources.
- Outside of the capital, large swaths of empty land are occasionally broken up by small villages and collective farms.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Social:_North_Torbia

Assessment
Fearful of both South Torbia and the West, North Torbians will be supportive of their government's efforts to reunite the two Torbias.

INFORMATION

South Torbia/ROT

- South Torbia has a thriving and relatively free information environment.
- Internet and television media are state-of-the-art, and the most important form of media in South Torbia.
- South Torbia's mass media operates with freedom of the press.
- The internet is the most free form of information media, with social media being the preferred means of expressing individual opinions.
- South Torbians have access to information from sources around the world.
- The telephone infrastructure in South Torbia is one of the most advanced in the region with 5G penetration currently covering about 15% of the country with about a 5% increase each year.
- Traditional AM/FM broadcasting stations remain in use with infrastructure support for both digital and satellite radio continuing to grow as both forms of broadcasting continue to become more main stream.

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Information:_South_Torbia

Assessment
South Torbia is susceptible to INFOWAR attack by the North Torbians who will use it to weaken South Torbian morale through the degradation of information services.

North Torbia/DPRT

- As part of its efforts to maintain control of its population, the government controls nearly every facet of the information environment.
- North Torbia's government controls a sophisticated and extremely capable INFOWAR and Cyber capability that it uses against external opposition and adversarial governments.
- all forms of news media (are controlled by the government and purposefully shaped to fit the Torbian Worker's Party (WPT) narrative.
- While the government has previously been successful at isolating the population from the rest of the world, this task is becoming more difficult with every day that passes.
- North Torbia does not have its own Global Navigation Satellite System (GNSS) and must rely on outside GNSS systems. The military uses Donovian and Olvanan GNSS systems but they may use western GPS systems as well.
- All radio frequencies are reserved for use of the North Torbian government. All infrastructure is built and controlled by the government. Radios produced in North Torbia can only listen to the DPRT sponsored radio stations.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Information:_North_Torbia

Assessment
North Torbia will make extensive use of its INFOWAR and Cyber capabilities.

INFRASTRUCTURE

South Torbia/ROT

- South Torbia uses a combination of renewable, hydrocarbon and hydroelectric power.
- Majority of people living in urban areas have modern water and sanitation facilities.
- In rural areas, access to modern water and sanitation is often troublesome
- Military traffic on road networks will be stressed due to large amounts of traffic.
- South Torbians are known for being aggressive and unpredictable when driving in traffic.
- South Torbians are heavily reliant on public transport including buses and trains as well as taxis, car rental and ride-hailing services (Uber).

https://odin.tradoc.army.mil/DATE/Pacific/South_Torbia/Infrastructure:_South_Torbia

Assessment
Despite an extensive, well-developed road infrastructure military traffic will face a number of challenges moving into tactical AOs.

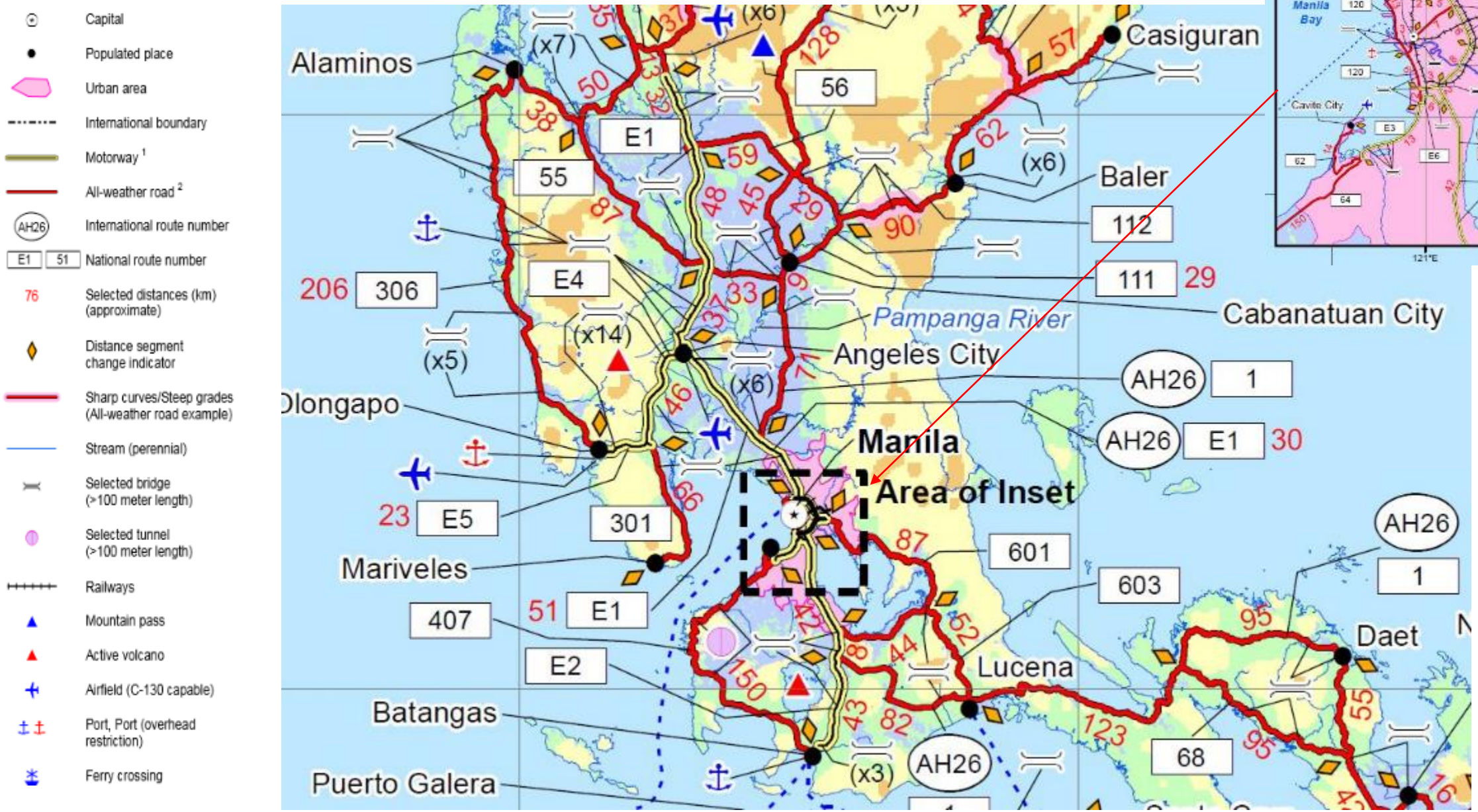
North Torbia

- Approximately 48% of North Torbian citizens live in cities or urban areas
- Only about 20% of the country's population, mostly the richer people in the urban areas, having accessed to a piped sewage system.
- Infrastructure is old, dilapidated, in need of repair and upgrade and North Torbia's energy infrastructure is obsolete and in disrepair.
- Access to running water and indoor plumbing is limited to those Party Members in major urban areas.
- The transportation system is relatively underdeveloped with limited paved roads and rail infrastructure which is outdated and in poor shape.
- The telecommunications network is fibre optic and 3G cellular technology covering only 16% of the country.
- Industrial infrastructure is nearly beyond repair due to years of underinvestment, shortages of spare parts, and poor maintenance.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Infrastructure:_North_Torbia

Assessment
North Torbia doesn't not have the capacity to conduct a sustained military campaign.

SOUTH TORBIA TRANSPORTATION OVERVIEW



NORTH TORBIA TRANSPORTATION OVERVIEW

- Capital
- Populated place
- Urban area
- International boundary
- Motorway [1]
- All-weather road [2]
- AH26 — International route number
- E1 / 51 — National route number
- 76 — Selected distances (km) (approximate)
- Distance segment change indicator
- Sharp curves/Steep grades (All-weather road example)
- Stream (perennial)
- Selected bridge (>100 meter length)
- Selected tunnel (>100 meter length)
- Railways
- Mountain pass
- Active volcano
- Airfield (C-130 capable)
- Port, Port (overhead restriction)
- Ferry crossing

SPACE EFFECTS

South Torbia/ROT

- Eight communication satellites
- Three navigation satellite systems using L-band transponders providing coverage of the Asia-Pacific region
- South Torbian military units purchase commercial off-the-shelf satellite navigation receivers for navigation support.
- Three satellites for dedicated military imagery.
- Actively pursuing a nascent space program.

Assessment
South Torbian assets may be useful in supporting coalition force operations in South Torbia.

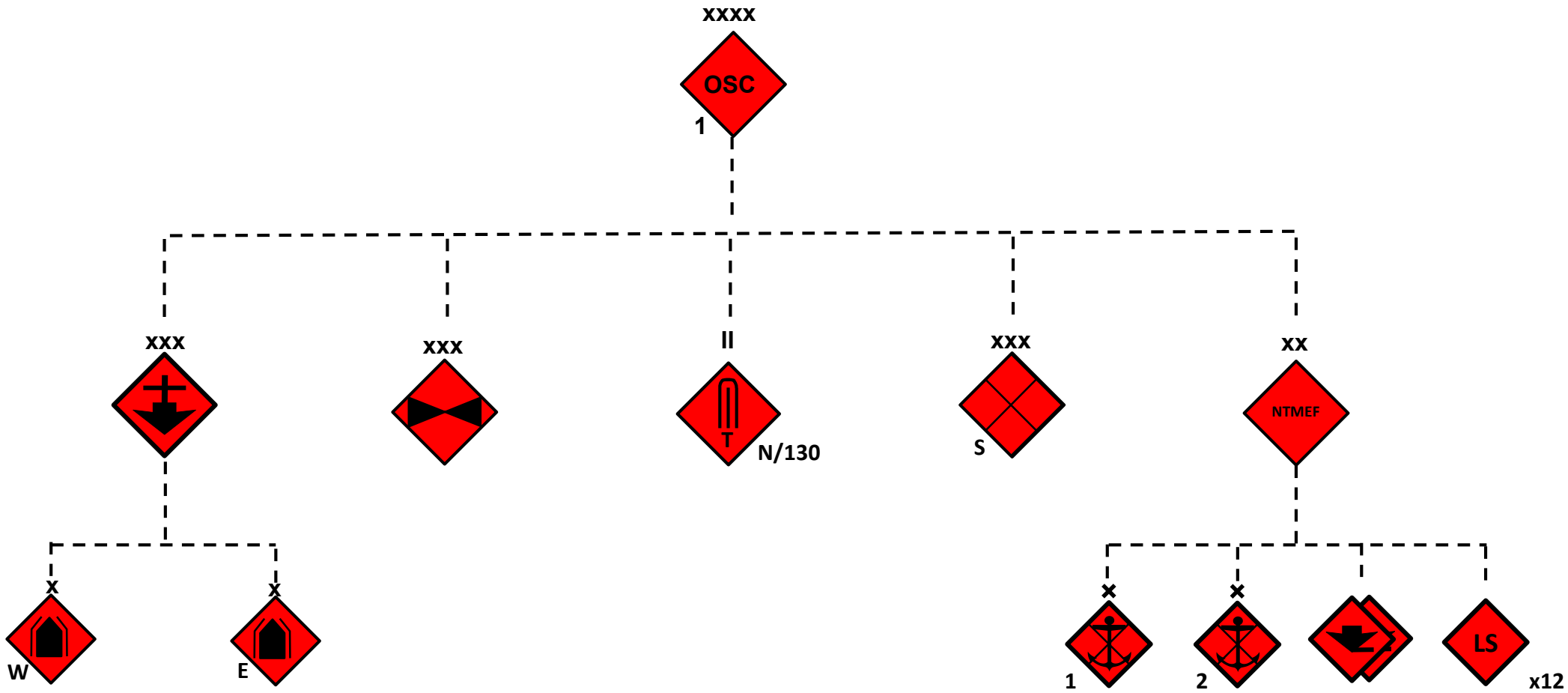
North Torbia/DPRT

- North Torbia actively working on space program and satellites.
- Currently only has one satellite in orbit but is working towards designing and launching another.
- Does not have any navigation satellites and may be using Olvanan or Donovian satellites for this purpose.
- Limited information on future endeavours of North Torbian space programs.

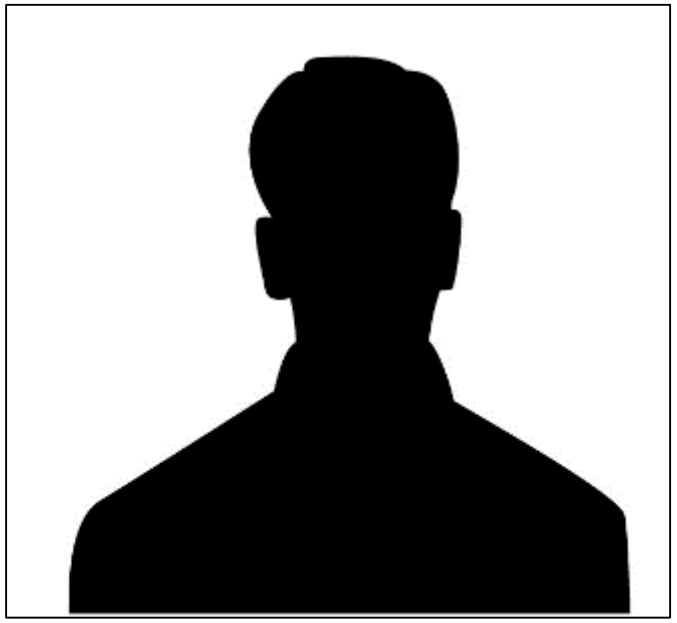
Assessment
Potential targeting of third party space assets may be difficult.

3. Evaluating the threat

NORTH TORBIA – 1st Operational Strategic Command (1 OSC)

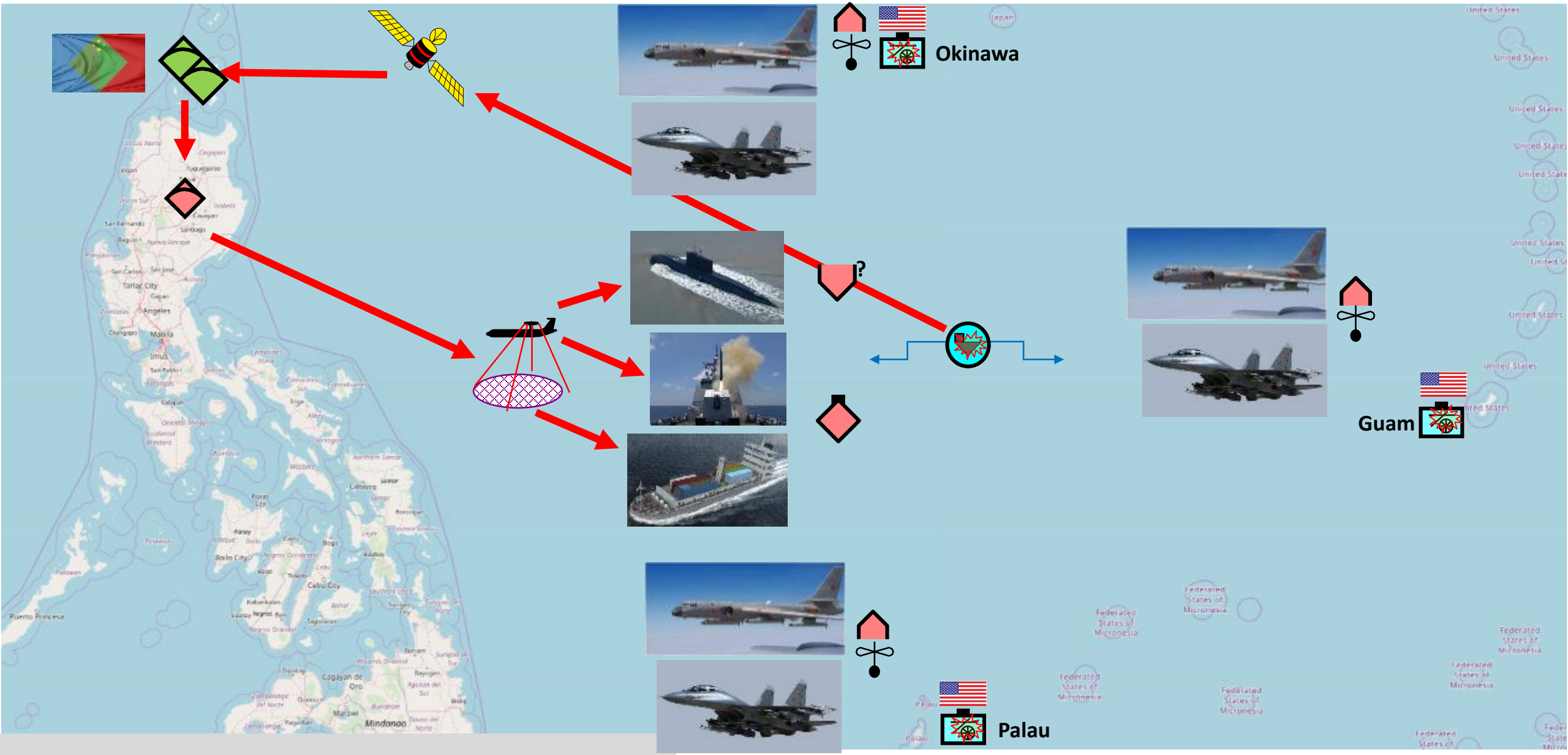


DAEJANG (GENERAL) MIN-YOUNG-JA COMMANDER 1 OSC

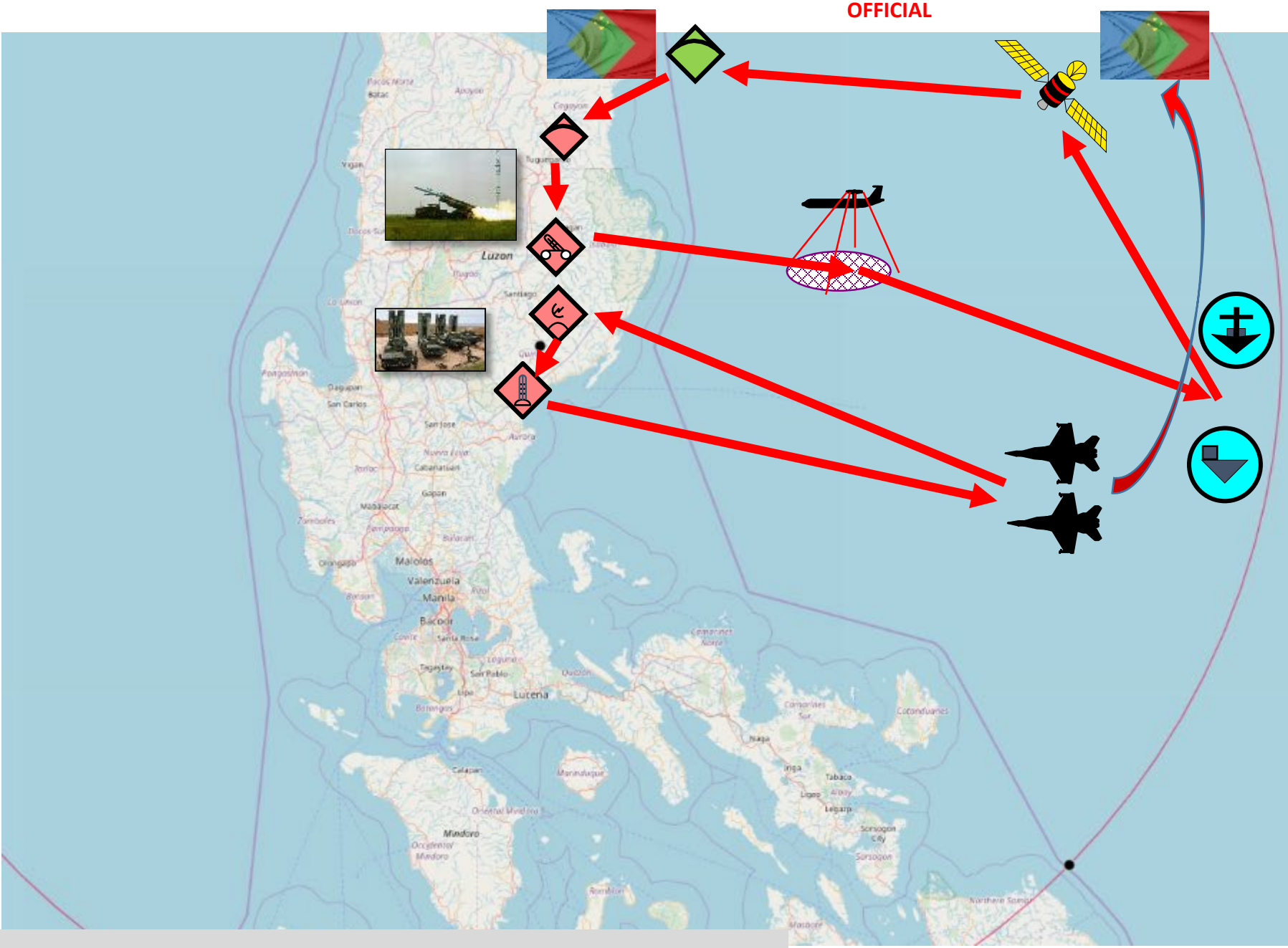


DOB	13 Sep 67
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Santiago, North Torbia
Education	Torbian Military Academy (Baguio) – 1989 (commissioned into Infantry) Song Yang-Hwan Military College – 2008 Olvanan National Defense University – 2012
Religion	N/A
Marital Status	Married 1996 – Kim Sujin (nee Pu) Children – 1 son (12 yrs)
Personality Traits	• Known to be details focussed • Allows freedom of action for subordinate commanders • Does not follow doctrine rigidly (reputation for breaking rules) • Ambitious and charismatic
Biography	Min-Young-Ja has shown himself to be one of the North Torbia's most tactically able commanders. He is known to be eloquent and charismatic. He instils strong loyalty from subordinates and is popular with his troops. This confidence means that at times he may be reluctant to listen to alternative views if his mind is already set on a course of action.

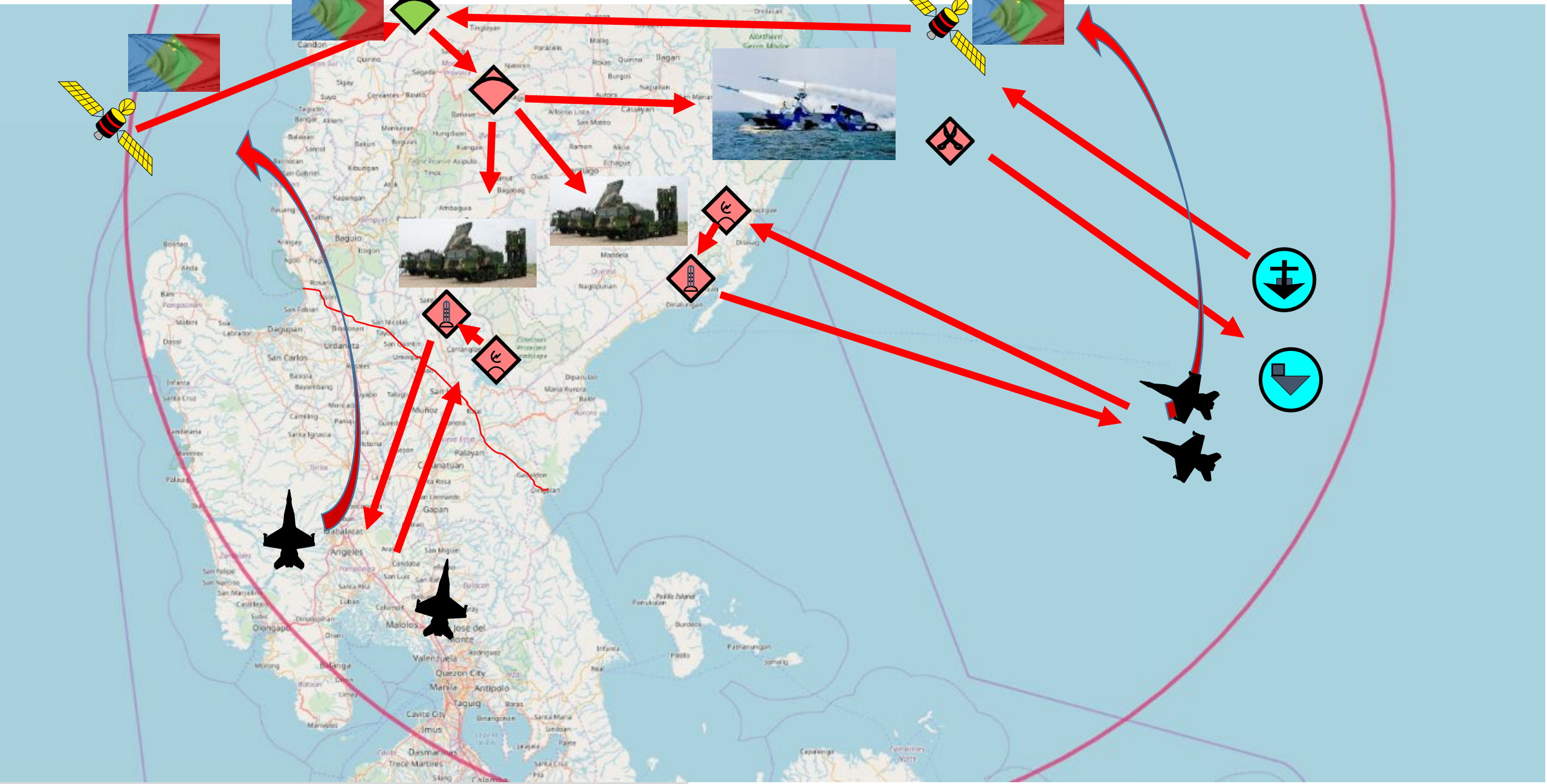
NORTH TORBIAN A2AD CONOPS



POTENTIAL TARGETS - DEFENCE LAYER 1

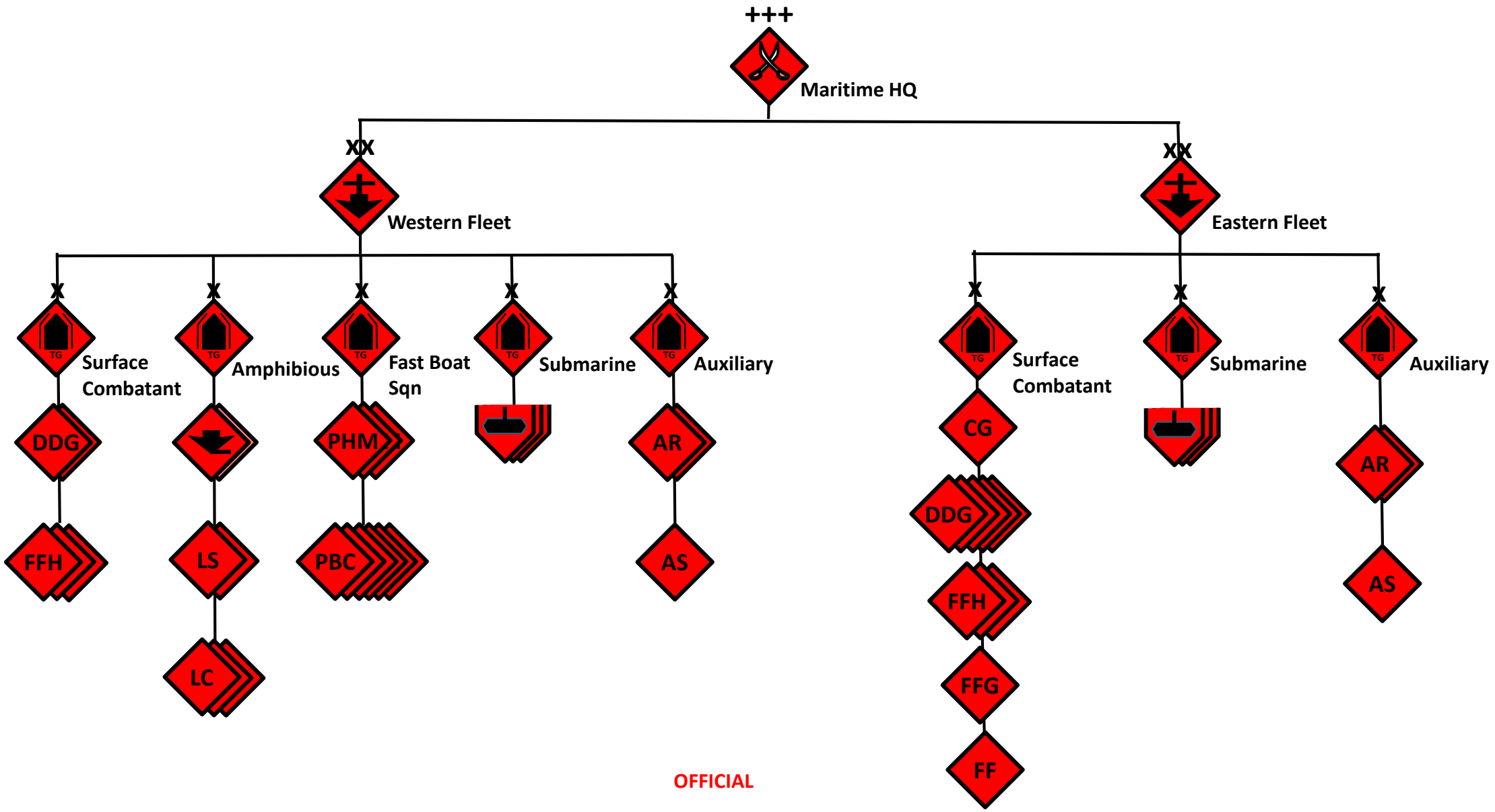


POTENTIAL TARGETS - DEFENCE LAYER 2

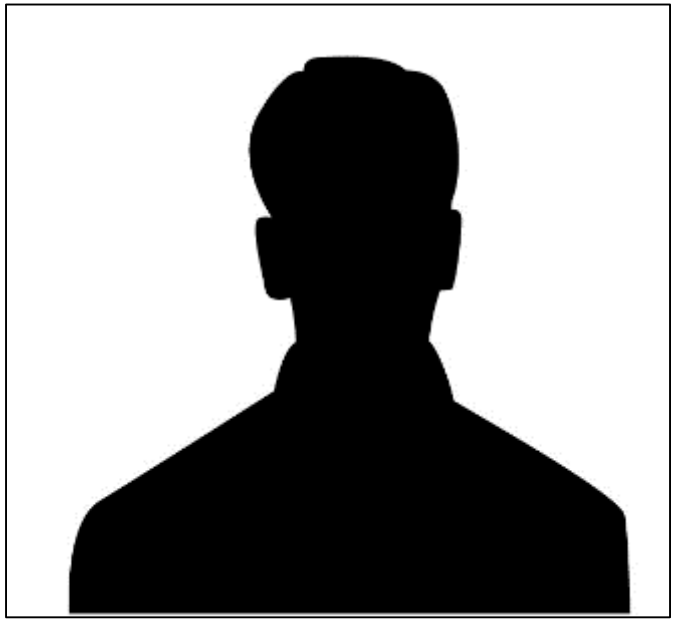


POTENTIAL TARGETS - DEFENCE LAYER 3

NORTH TORBIAN/TORBIAN PEOPLE'S NAVY (TPN)

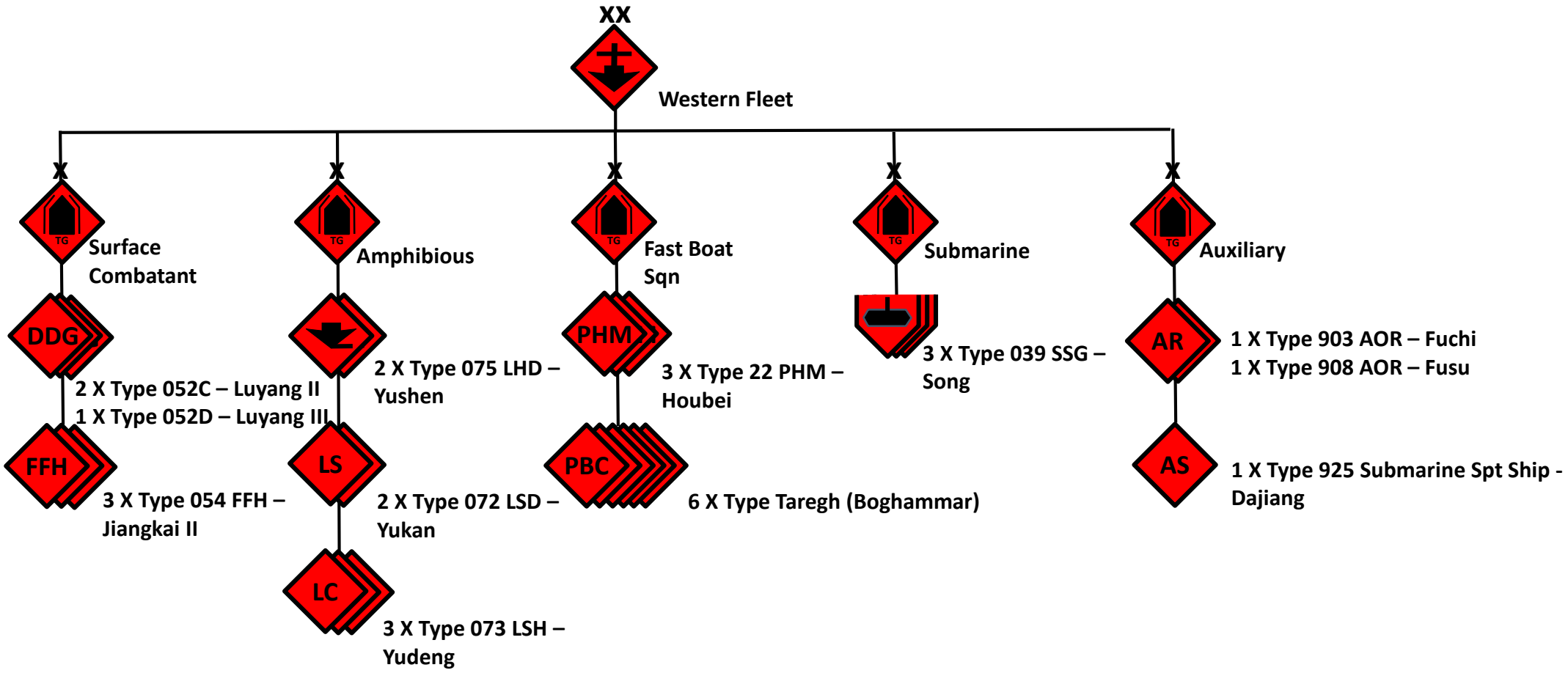


SANGJANG (VICE ADMIRAL) COMMANDER TPN

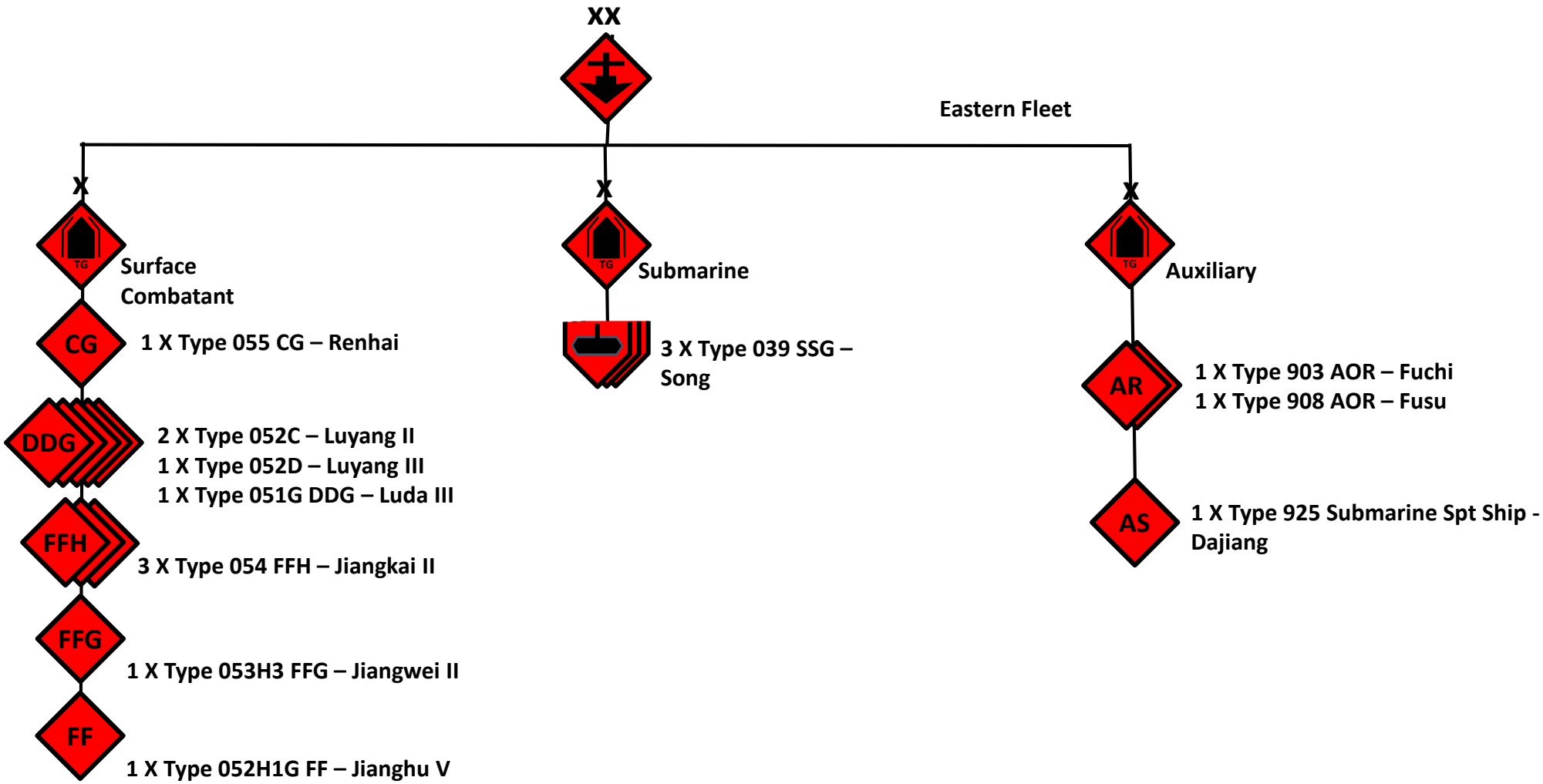


DOB	06 Jun 1980
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Cauayan, North Torbia
Education	Torbian Military Academy (Baguio) – 2002 (commissioned into TPN)
Religion	Buddhist
Marital Status	Married – spouse unknown Children - unknown
Personality Traits	• Aggressive, diligent • Competent and Tactically proficient • Well read on warfare
Biography	Kal Ujin exhibits a keen interest in the study of warfare. He has submitted several essays on the tactical use of armour on the battlefield to the Military Academy and his profile is well known amongst his peers.

NORTH TORBIAN/TORBIAN PEOPLE'S NAVY (TPN) WESTERN FLEET



NORTH TORBIAN/TORBIAN PEOPLE'S NAVY (TPN) EASTERN FLEET



THREAT WEAPONS AND PLATFORMS

Luyang II DDG (2)

HHQ-9A SAM (48) 135NM
YJ-62 SSM (8) 220 NM
100mm Gun
Z-9 or KA-28 Helo
YU-7 LWT (ALT & SLT)

Luyang III DDG (1)

HHQ-9B SAM (64) 160NM
YJ-62 SSM (32) 220 NM
130mm Gun
Z-9 or KA-28 Helo
YU-7 LWT (ALT & SLT)

Jiangkai II FFH (3)

HHQ-16 SAM (32) 27NM
YJ-83 SSM (8) 100 NM
100mm Gun
Z-9 or KA-28 Helo
2 x six-tube Type 87
ASW rockets (36)

Renhai Type 055 CG (1)

HHQ-10 SAM (32) 5NM
112 VLS:
HHQ-9B SAM 160NM
YJ-18 ASM 290NM
CJ-10 LACM 810NM
Missile-launched ASW torpedoes
130mm Gun
2 x Z-9 or z-18 Helo's
YU-7 LWT (ALT & SLT)

Song SSG (3)

YJ-8 SSM 23 NM
YU-4,5 and 6 HWT
6 FWD Tubes

Luda III DDG (1)

HHQ-7 SAM (24) 7NM
YJ-83 SSM (8) 100 NM
100mm Gun
NIL Helo
YU-7 LWT SLT

Jiangwei II FFG (1)

HHQ-10 SAM (24) 5NM
YJ-83 SSM (8) 100 NM
100mm Gun
Z-9 Helo
YU-7 LWT ALT & SLT

Jianghu V FF (1)

NIL SAM
YJ-83 SSM (8) 100 NM
100mm Gun
Z-9 Helo
YU-7 LWT ALT & SLT

NT Flagged MV

YJ-18C SSM (4) 290 NM
Container Based

NORTH TORBIAN NAVAL THREAT

- North Torbian Navy consists of two fleets:
  - Western fleet spt the North Torbian MEF
  - Eastern fleet conducting blue water operations and providing coastal defence to Southern Army in the east.
- Eastern fleet includes following platforms:
  1. Renhai Type 055 CG
  2. Luyang III DDG
  3. Song SSG
- All platforms are YJ-18B cruise missile-capable.
- Eastern fleet's is likely to be used in its primary role conducting blue water operations as part of North Torbia's A2AD strategy.
- Likely North Torbian naval threat could spt the Southern Army as part of its SNOW DOME/operational strategy.
- Submarines may be used to insert additional TPA SPF on east coast of South Torbia.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Military:_North_Torbia#Air_Forces_Overview

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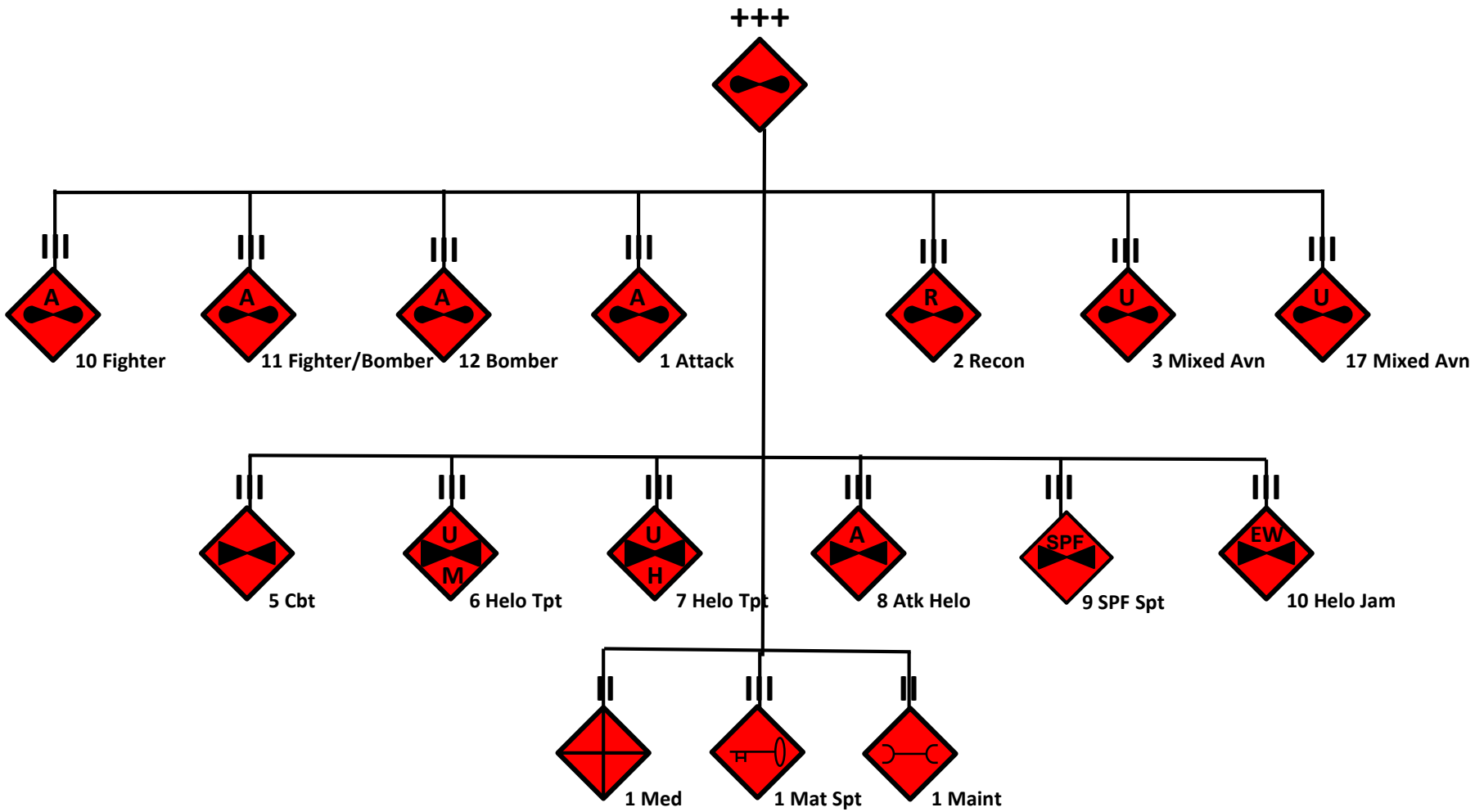
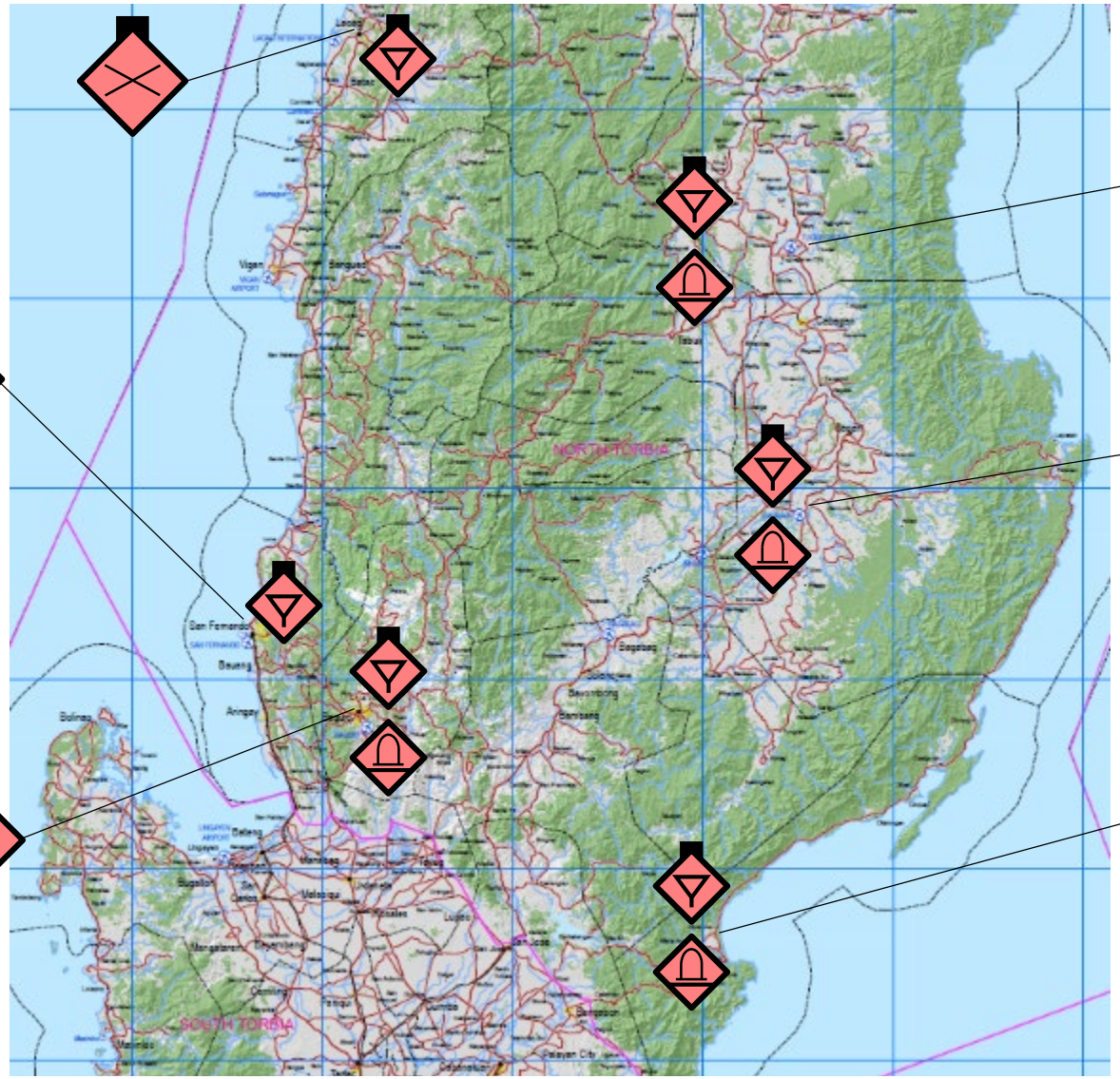
NORTH TORBIAN/TORBIAN PEOPLE'S AIR FORCE (TPAF)



TPAF AIRBASES AND UNIT LOCATIONS



A
1 Attack
A
8 Atk Helo

R
2 Recon
5 Cbt Helo
U
17 Mixed Avn
U
M
6 Tpt Avn
SPF
9 SPF Spt

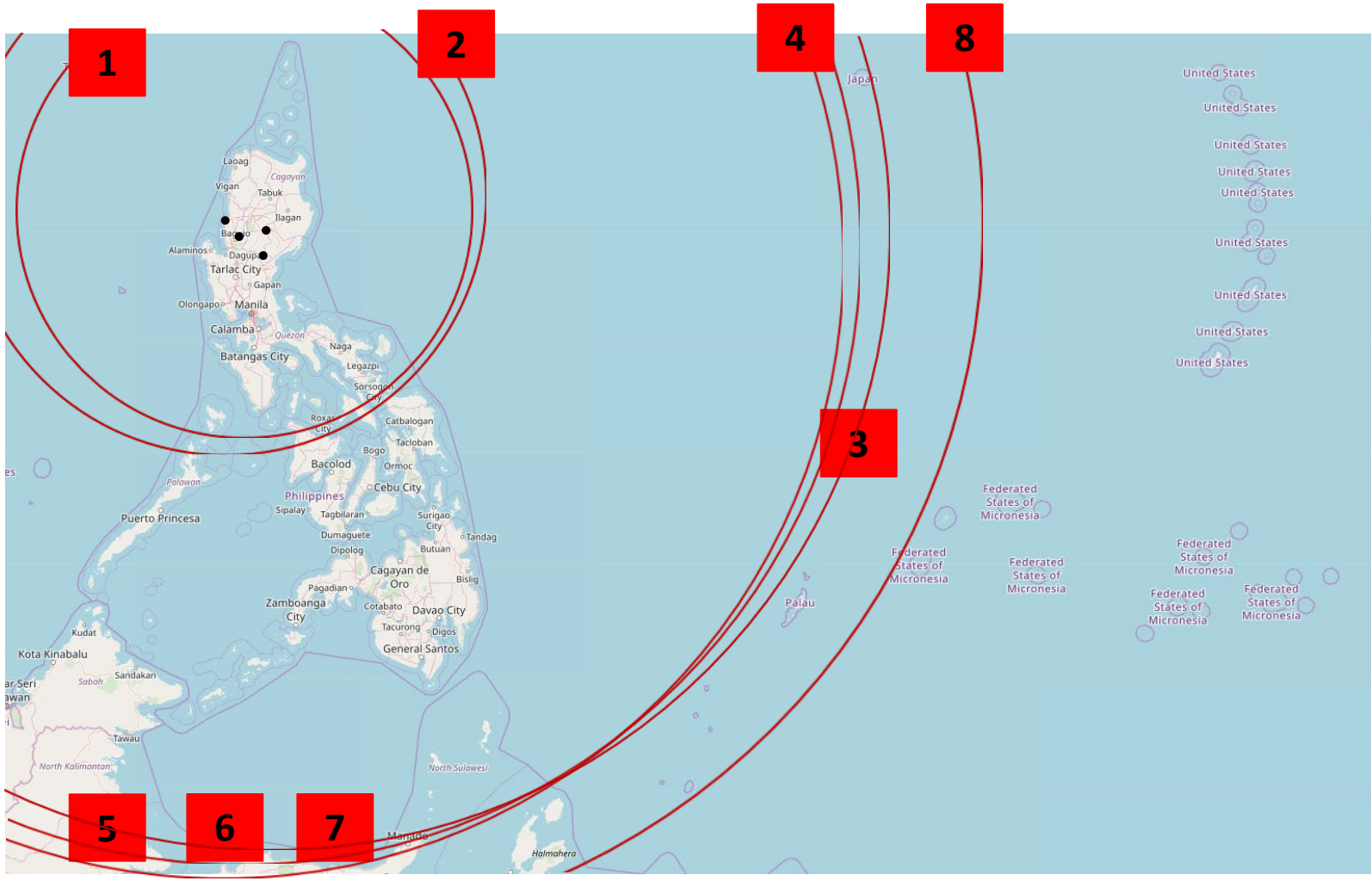
U
H
7 Tpt Avn

A
11 Fighter
Bomber
A
12 Bomber

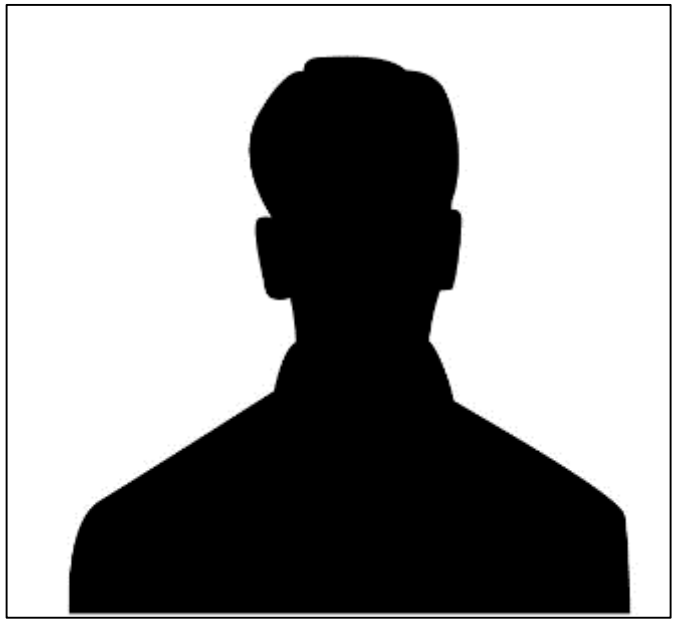
A
10 Fighter
EW
10 Helo Jam
U
3 Mixed Avn

TPAF COMBAT RANGES– SOUTH TORBIA

Serial	Location	Aircraft	Combat range
1	San Fernando	Su-39	800 km
2	Baguio	Su-24MR	615 km
3	Baguio	J-16D	1500 km
4	St Luis	J-11B	1500 km
5	Cauayan	Su-30MMK	1500 km
6	Cauayan	J-16	1500 km
7	Cauayan	Hong-6	1500 km
8	Cauayan	Tu-22M3	2400 km

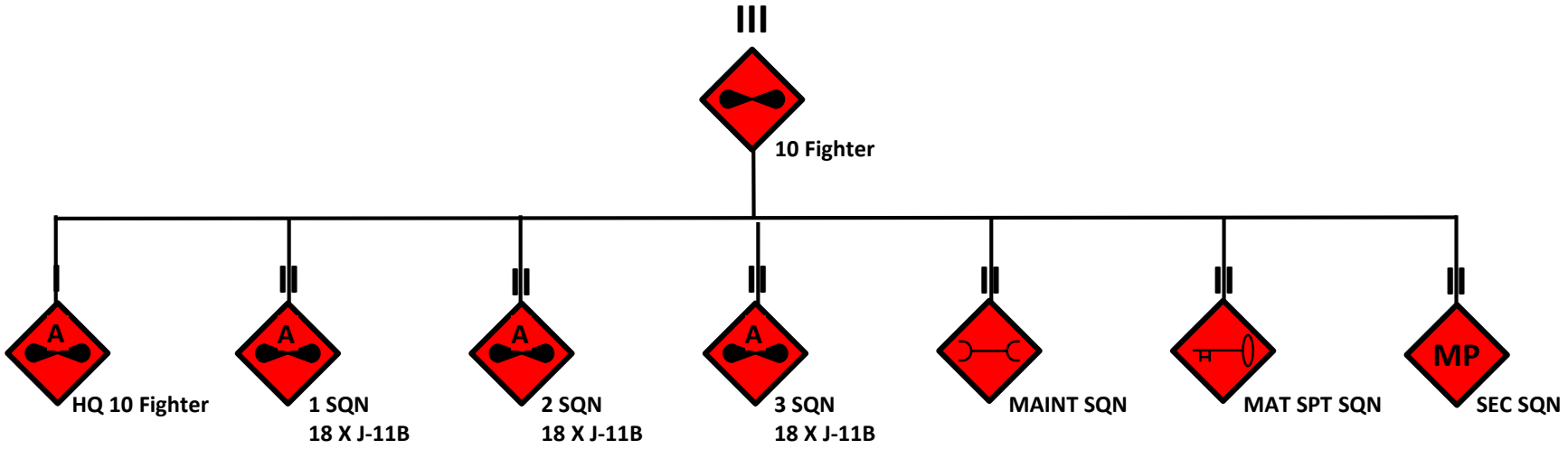


SANGJANG (COLONEL GENERAL) SU JIN-HO COMMANDER TPAF GROUP

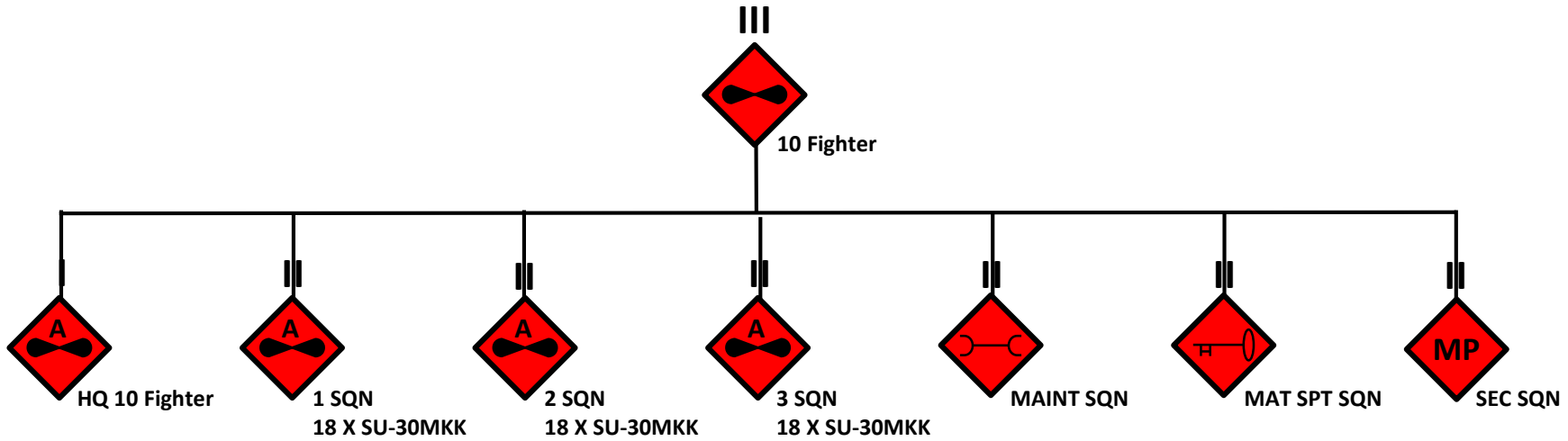


DOB	11 Nov 1970
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Baguio, North Torbia
Education	Torbian Military Academy (Baguio) – 1992 (commissioned into TPAF) Song Yang-Hwan Military College – 2016
Religion	N/A
Marital Status	Married 1997 – P'yong Yoon-Ji
Personality Traits	• Meticulous • Disciplinarian • Orthodox thinking
Biography	Su Jin-Ho is known as a strict commander who follows doctrine to the letter. If there is a rule/SOP/doctrine pertaining to a specific aspect of military service, he will follow it with very little deviation. He expects his subordinates to follow the same set of rules meticulously with punishments meted out for minor infractions. Su Jin-Ho is known to be extremely loyal to the Song family and the NT government.

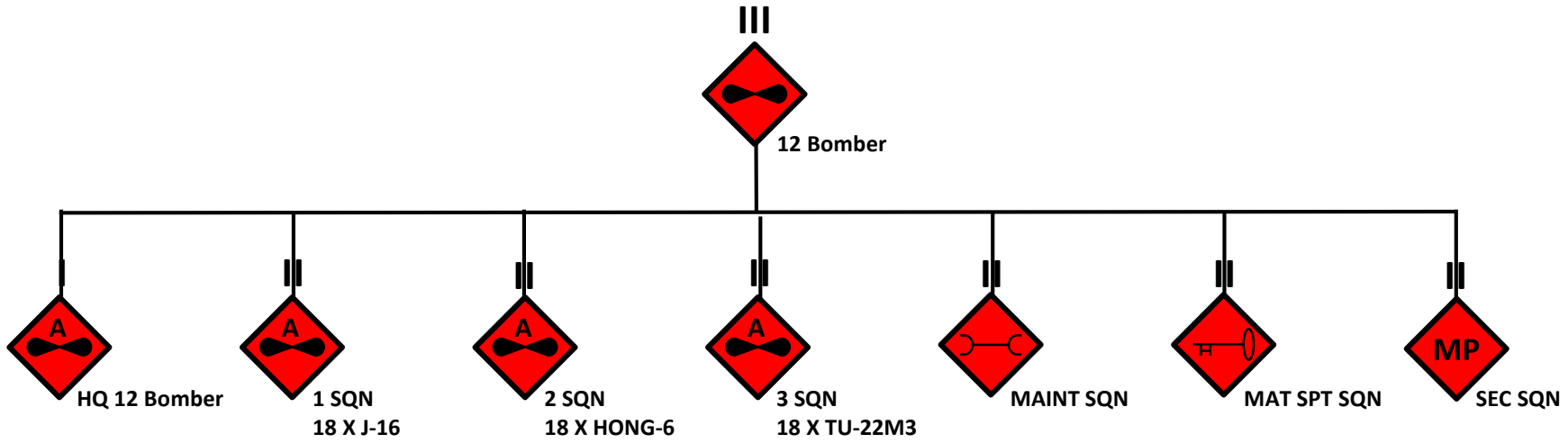
TPAF 10TH FIGHTER REGIMENT



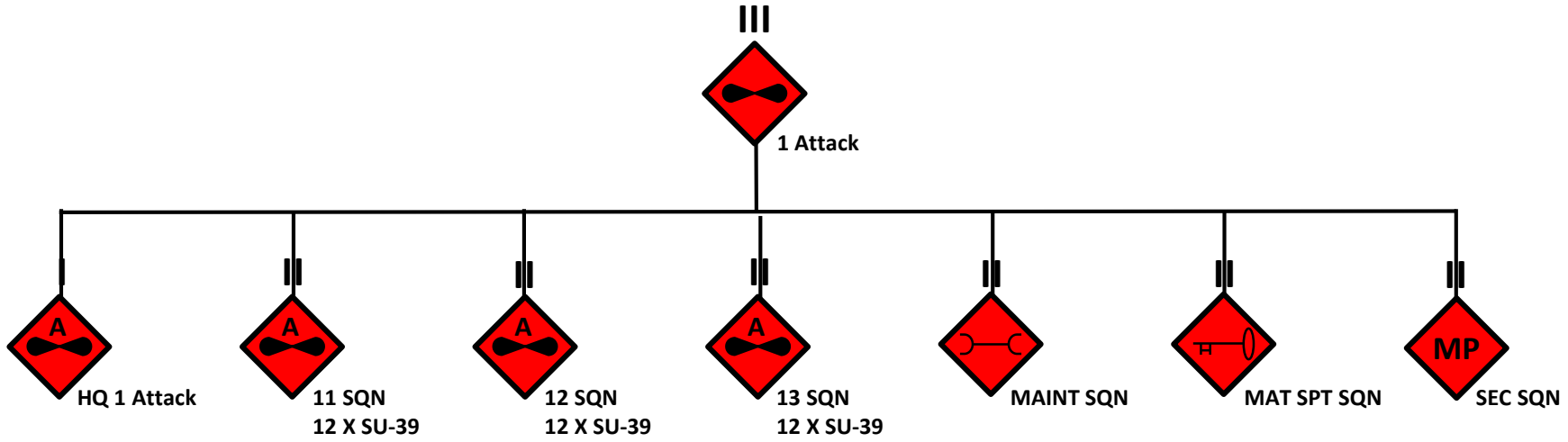
TPAF 11TH FIGHTER BOMBER REGIMENT



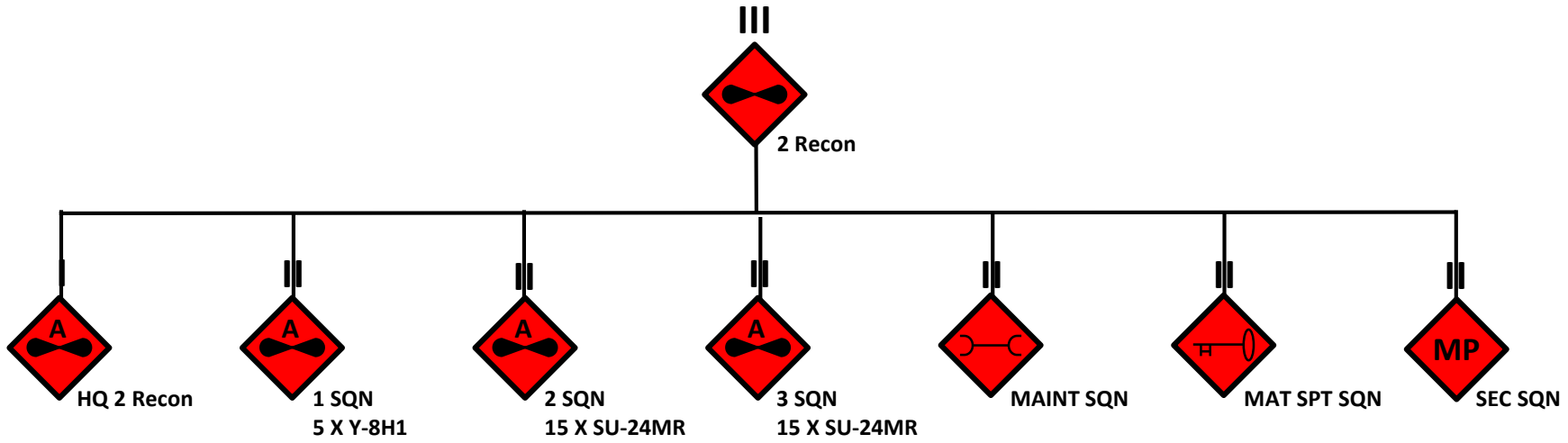
TPAF 12TH BOMBER REGIMENT



TPAF 1st ATTACK REGIMENT

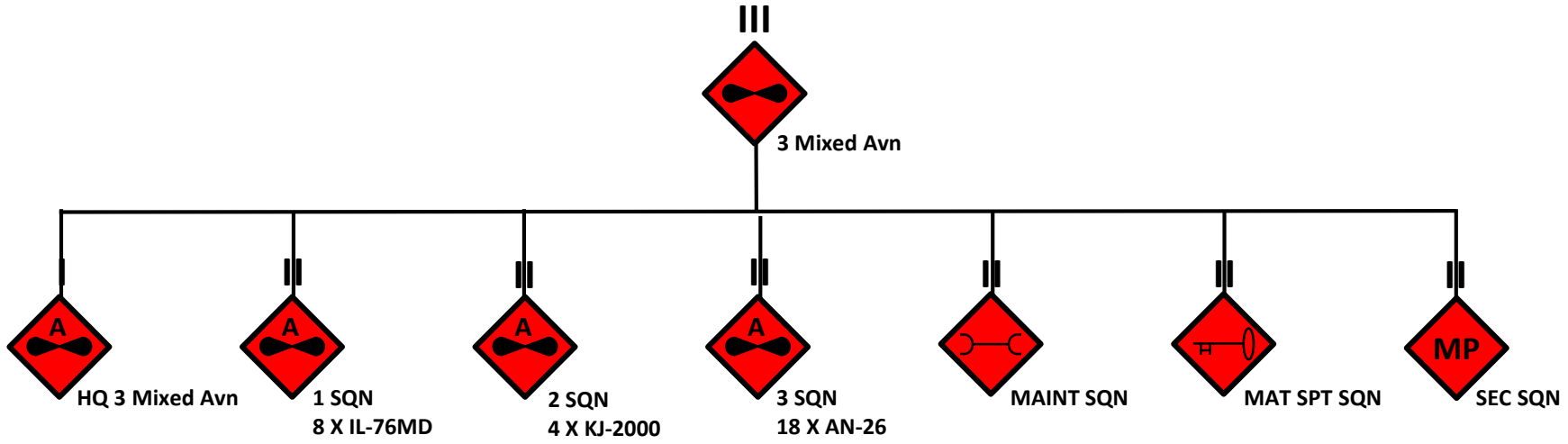


TPAF 2nd RECONAISSANCE REGIMENT

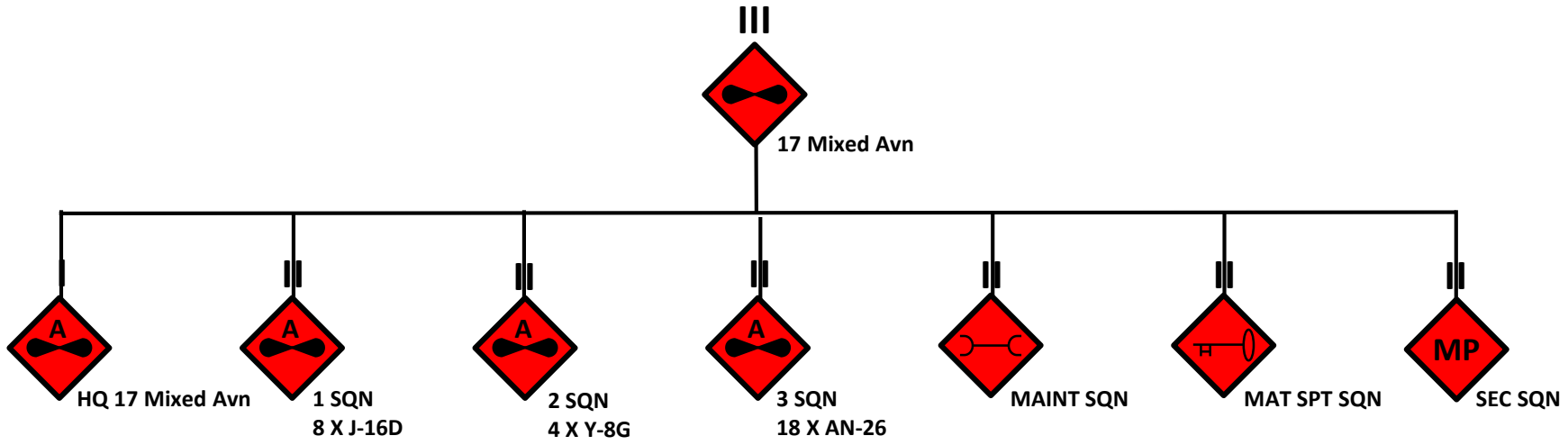


OFFICIAL

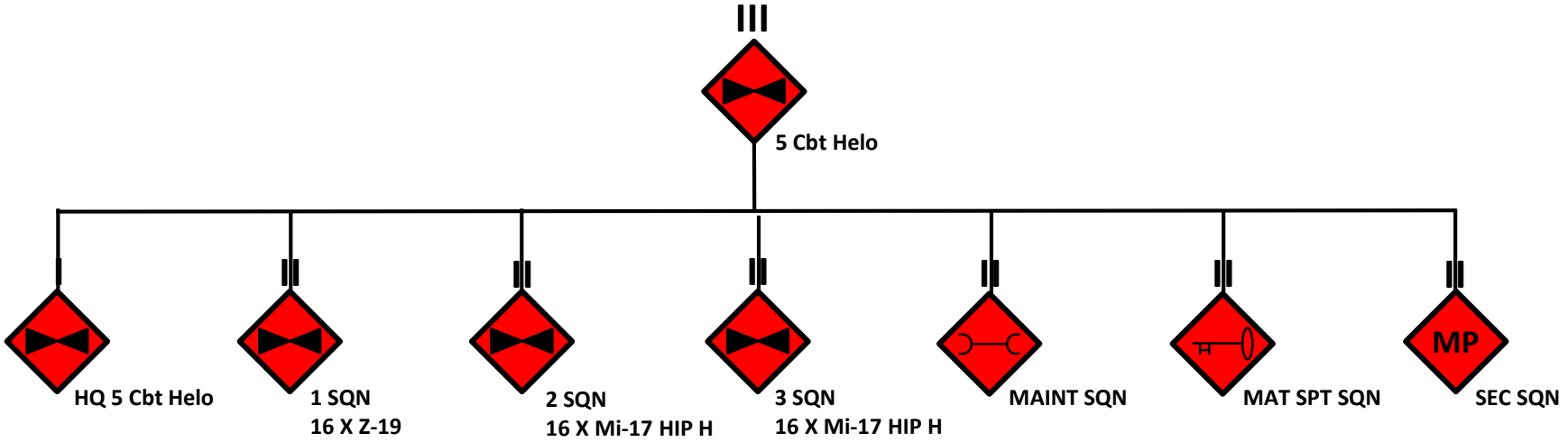
TPAF 3rd MIXED AVIATION REGIMENT



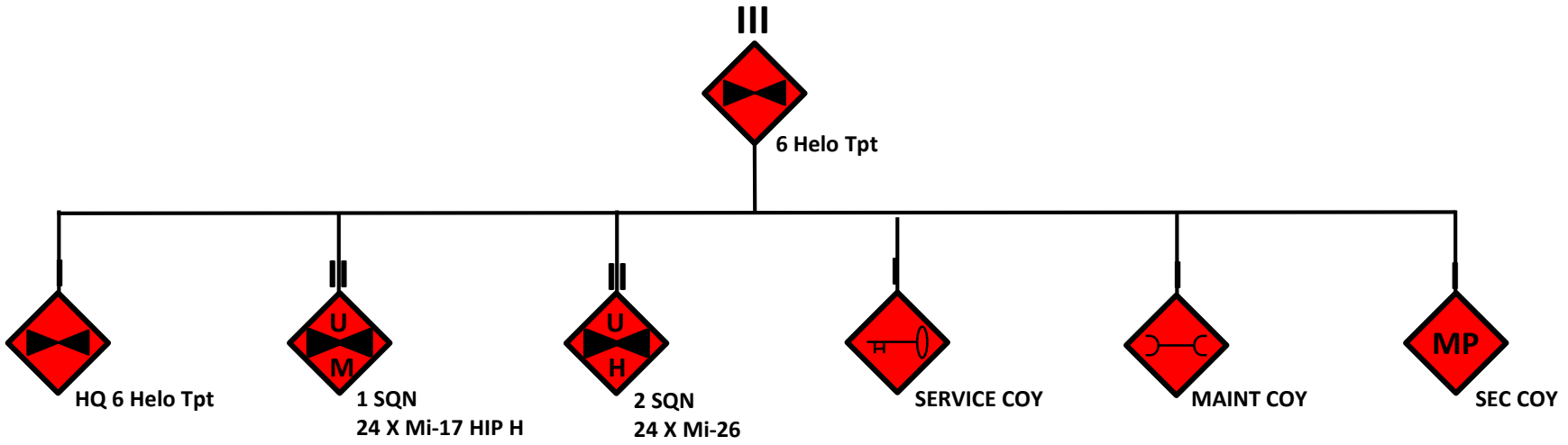
TPAF 17th MIXED AVIATION REGIMENT



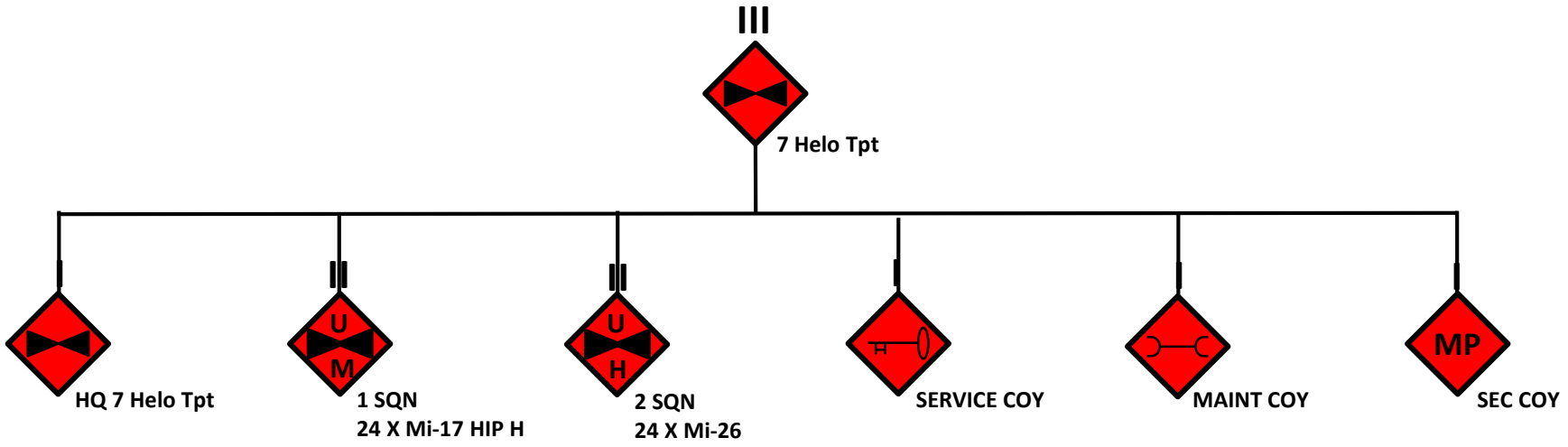
TPAF 5th COMBAT HELICOPTER REGIMENT



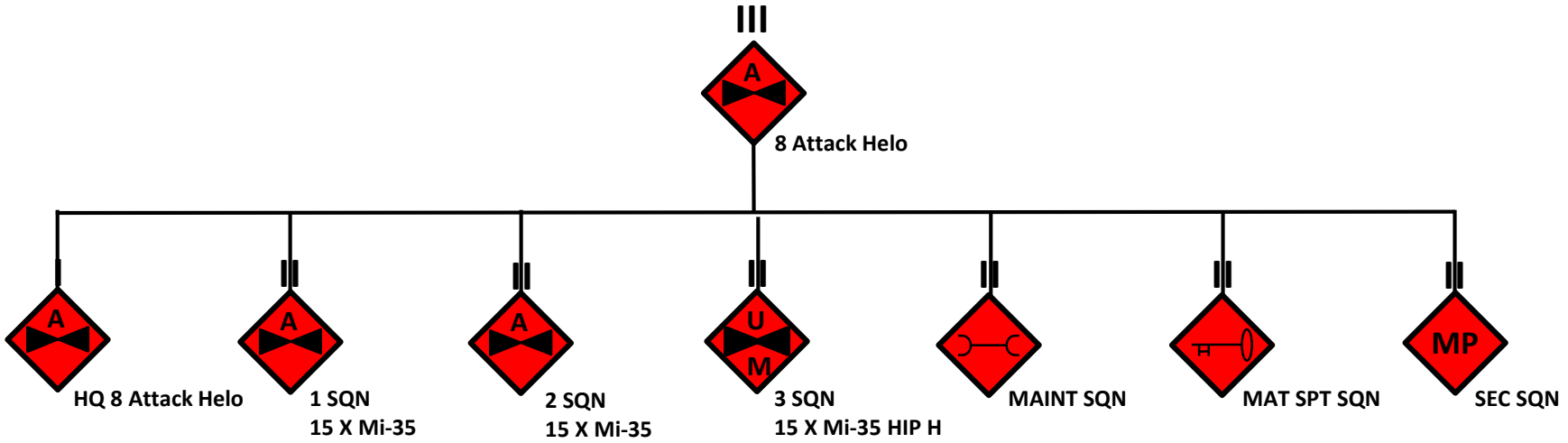
TPAF 6th HELICOPTER TRANSPORT REGIMENT



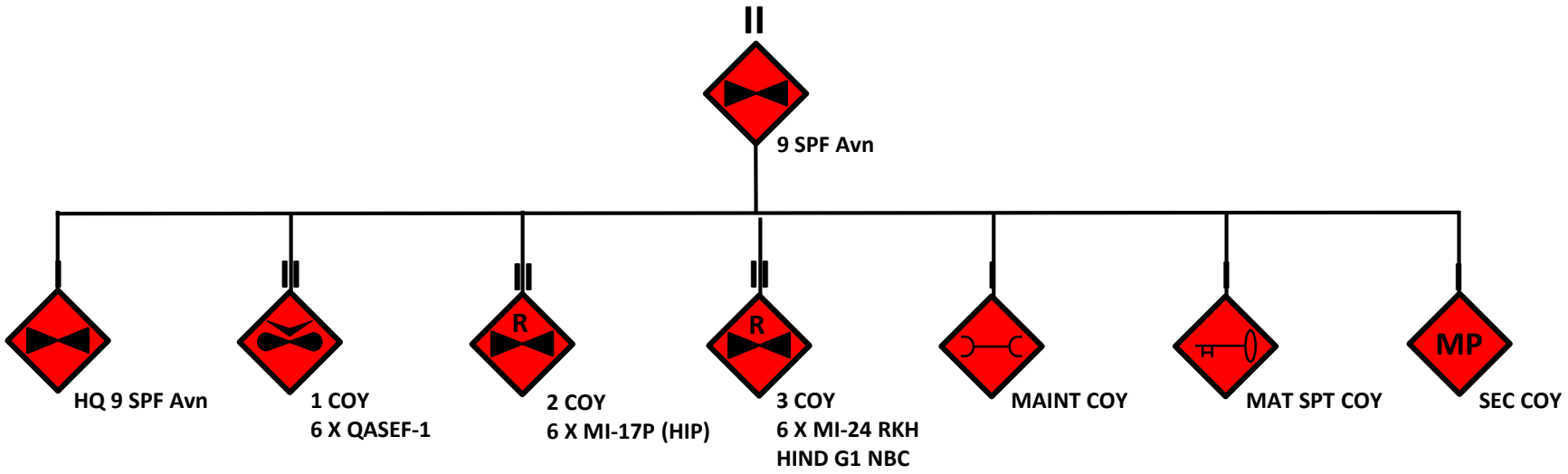
TPAF 7th HELICOPTER TRANSPORT REGIMENT



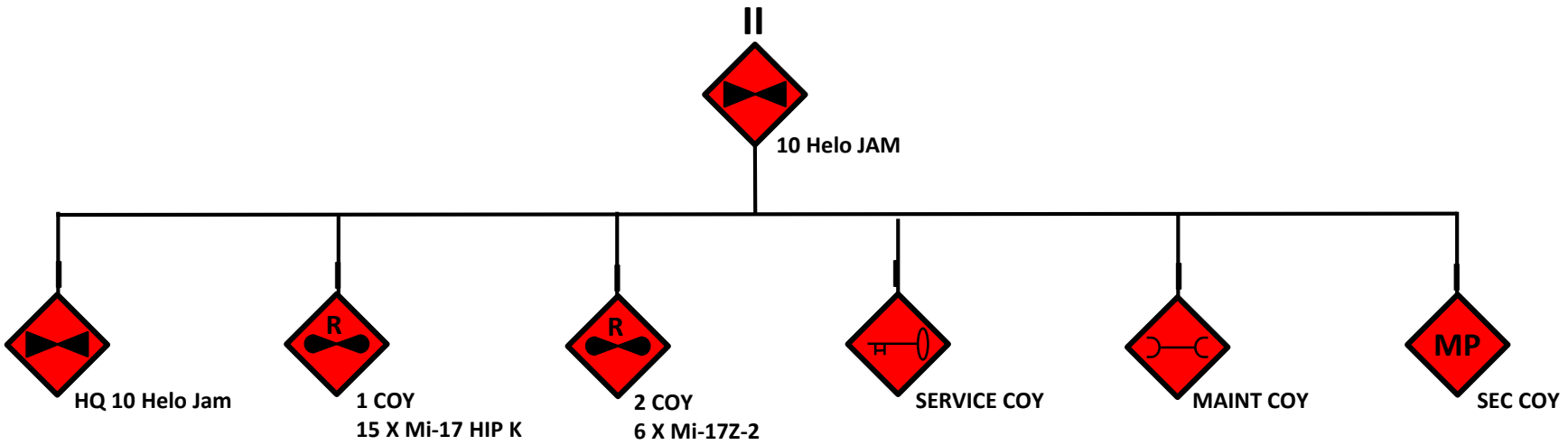
TPAF 8th ATTACK HELICOPTER REGIMENT



TPAF 9th SPF AVIATION SQUADRON



TPAF 10th HELICOPTER JAMMING SQUADRON



NORTH TORBIAN AIR THREAT

- The TPAF's 12th Bomber Regiment is an integral component of North Torbian A2AD strategy.
- The North Torbian air force is likely to use these acft to achieve this:
    1. Hong-6 Strategic Bomber with a combat range of almost 6,000 Km and the capability of being able to launch air-to-ground cruise missiles pose a significant threat to US bases in Guam, Palau and Okinawa
    2. Similar capability as the Hong-6, the Tu-22M3 (Backfire-C) has a similar capability albeit at a lesser range.
    3. The J-16D provides an EW jamming capability and are likely to work with the Hong-6 bombers.
- Highly likely the TPAF will use these acft as part of its A2AD strategy.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Military:_North_Torbia#Air_Forces_Overview

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NORTH TORBIAN AIR THREAT

- North Torbian air force is able to achieve air superiority over North Torbian-held territory south of the MDL for short periods of time. Otherwise air parity exists.
- The North Torbian air force is likely to use these acft to achieve this:
    1. SU-30MKK a heavy class, all-weather, long-range strike fighter
    2. J-11B (Flanker-L) – a twin-engine fixed wing jet which can be used in a variety of roles but predominantly as an air superiority fighter.
- Highly likely North Torbian air threat will use these acft to assist in achieving air superiority over the AO to enable tactical fixed and rotary wing acft to spt TPA ground attack aircraft.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Military:_North_Torbia#Air_Forces_Overview

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NORTH TORBIAN AIR THREAT

- North Torbian air force is able to achieve air superiority over North Torbian-held territory south of the MDL for short periods of time. Otherwise air parity exists.
- The North Torbian air force are likely to operate a range of both fixed and rotary wing aircraft in the AO including:
    1. The Lang Shoong – a Long-Range Electronic Jamming Aircraft to provide EW spt to TPA gnd forces.
    2. SU-39 – an attack aircraft used in the ground attack role and may be equipped for anti-tank warfare
    3. Mi-17 – a medium twin-turbine multi-purpose helicopter which can carry up to 24 troops and may be equipped with S-5 rocket pods
    4. Mi-24 – a twin-engine combat helicopter equipped with a range of rocket pods and ATGM which can also carry up to eight troops.
- Highly likely North Torbian air threat will use its fixed and rotary wing ground attack aircraft against coalition armd units, EW and HQ/C2 nodes.

https://odin.tradoc.army.mil/DATE/Pacific/North_Torbia/Military:_North_Torbia#Air_Forces_Overview

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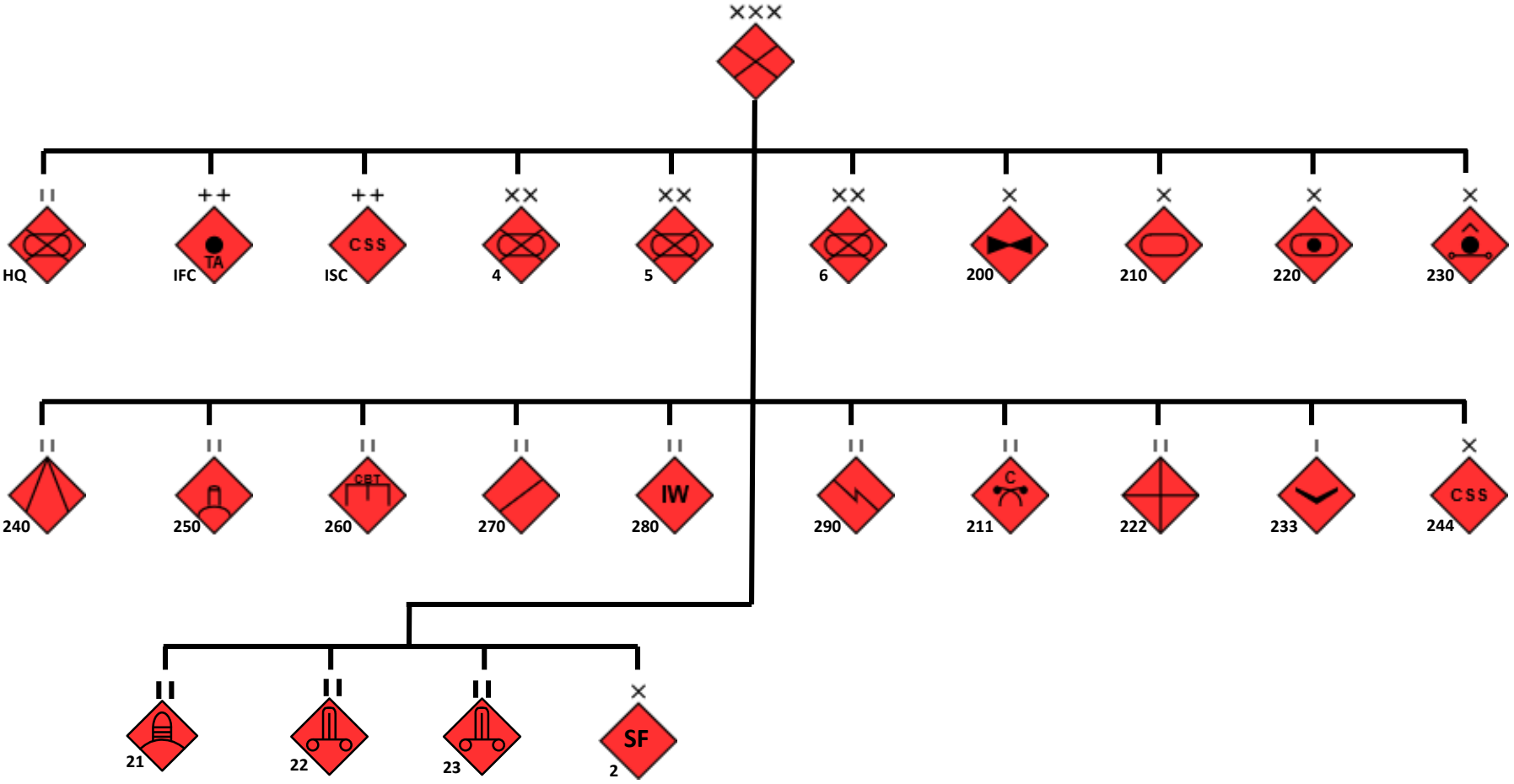
NORTH TORBIA – SOUTHERN ARMY



CRITICAL CAPABILITIES

- Artillery in hardened positions in mountain areas near border
- Artillery pieces and missiles can range Manila in South Torbia
- SPF BDE with elements already operating in South Torbia and likely assisted by the TCA
- INFOWAR with significant EW capability and according to reports upgraded recently with Olvanan equipment
- ROBUST SIGNALS CAPABILITY
- An effective A2AD/ IADS using the SNOW DOME strategy

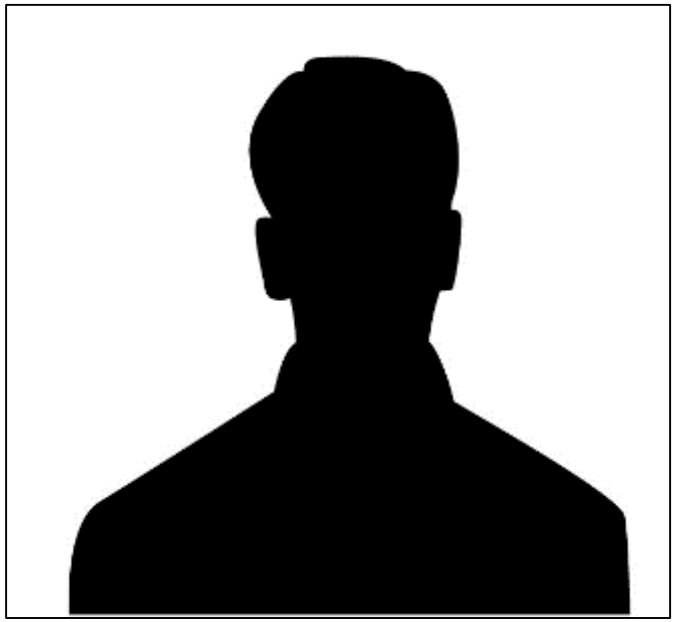
CRITICAL VULNERABILITIES

- Tier 2/Tier 3 Equipment
- Maintenance Issues / Readiness Rate was 80% but now significantly reduced and will need time to reconstitute.
- Other than personnel, lacks resources to fight protracted war; potential for supply shortages
- Lacks Sufficient Engineer Equipment to conduct breaching operations

CRITICAL ASSETS

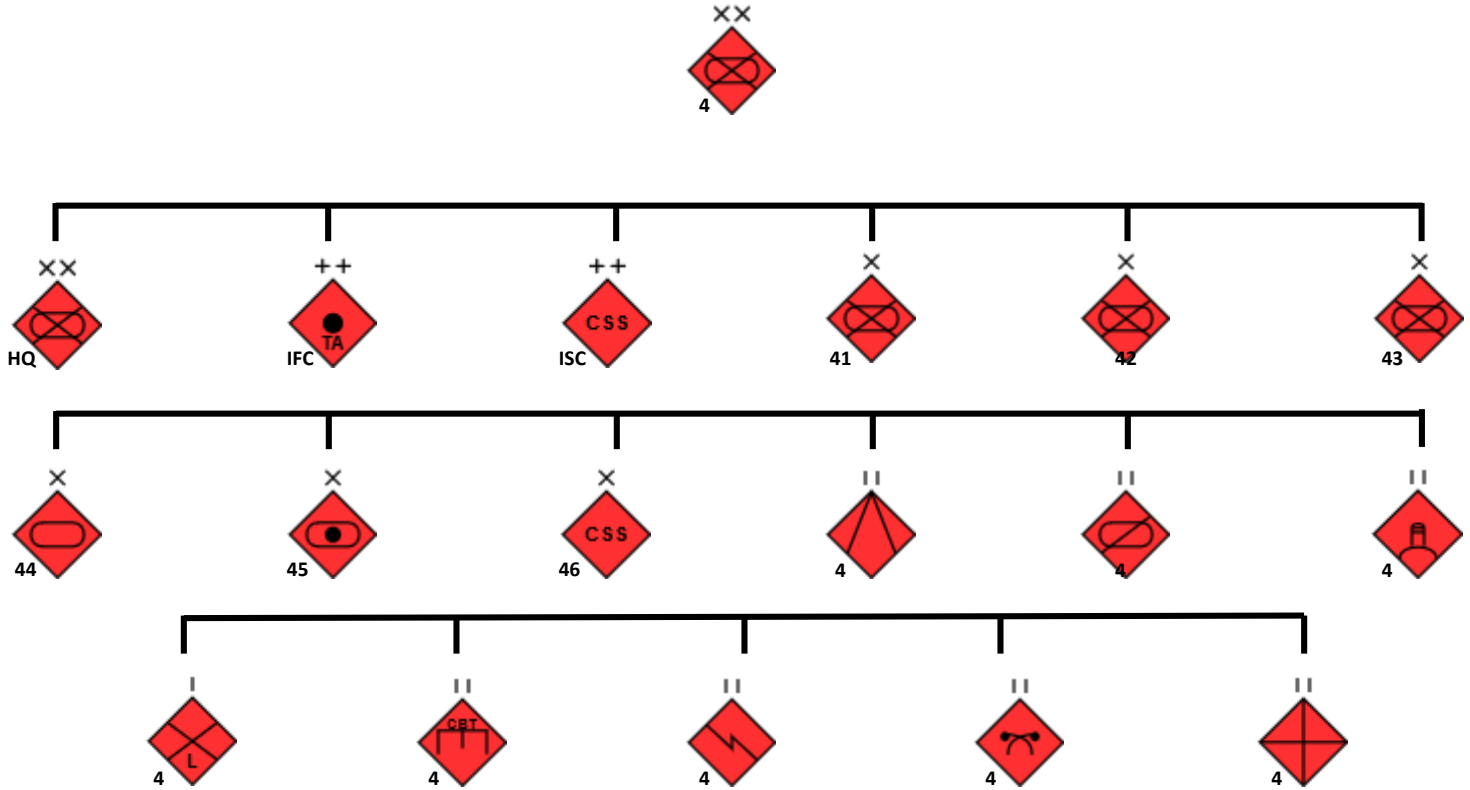
- 72 x 9A51 PRIMA MRL
- 66 x 2S23 SELF-PROPELLED MORTAR
- 120 x 2S9 SELF-PROPELLED MORTAR
- 78 x 2S6 SELF-PROPELLED AA
- 231 x UAV (VARIOUS MODELS)
- https://odin.tradoc.army.mil/FS/Pacific/North%20Torbia/NORTH%20TORBIA

SANGJANG (LIEUTENANT GENERAL) SONG TAE-HEE COMMANDER SOUTHERN ARMY



DOB	05 Jul 74
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Baguio, North Torbia
Education	Torbian Military Academy (Baguio) – 1989 (commissioned into Infantry) Song Yang-Hwan Military College – 2008 Olvanan National Defense University – 2012
Religion	N/A
Marital Status	Married – spouse unknown Children – unknown
Personality Traits	• Known to be details focussed • Allows freedom of action for subordinate commanders • Does not follow doctrine rigidly (reputation for breaking rules) • Ambitious and charismatic
Biography	Song Tae-Hee is a distant relative of Song Chong-Su (current ruling Torbian leader). He has used his political connections to rise up the ranks. This has allowed Song to be more brazen in his actions, giving him a 'maverick' reputation within the TPA.

NORTH TORBIA – 4 MECH INF DIV (IFV)



ASSESSMENT

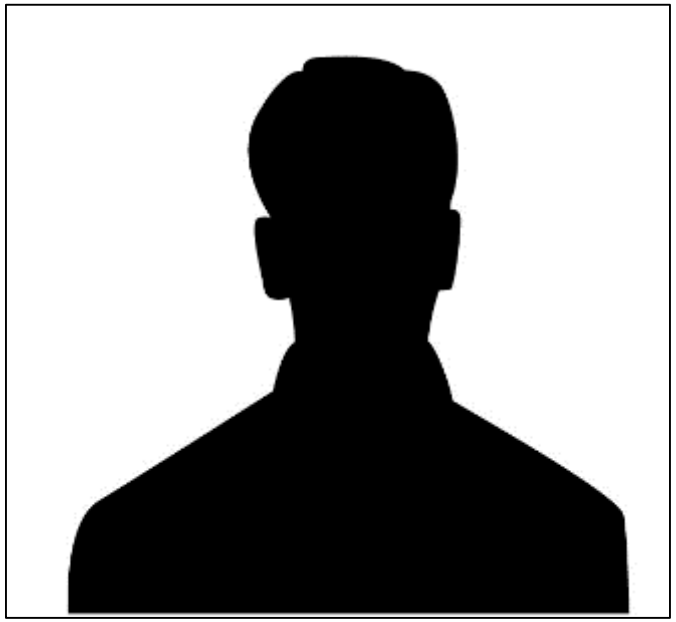
Currently in defensive posture in Dagupan and have commenced operations to secure the city and surrounds.

Combat capability assessed at less than 50% and will require reinforcements to continue assault south to Manila.

Likely to conduct aggressive defence of Dagupan employing urban operations and rely on its enablers to defeat opposing forces while it reconstitutes.

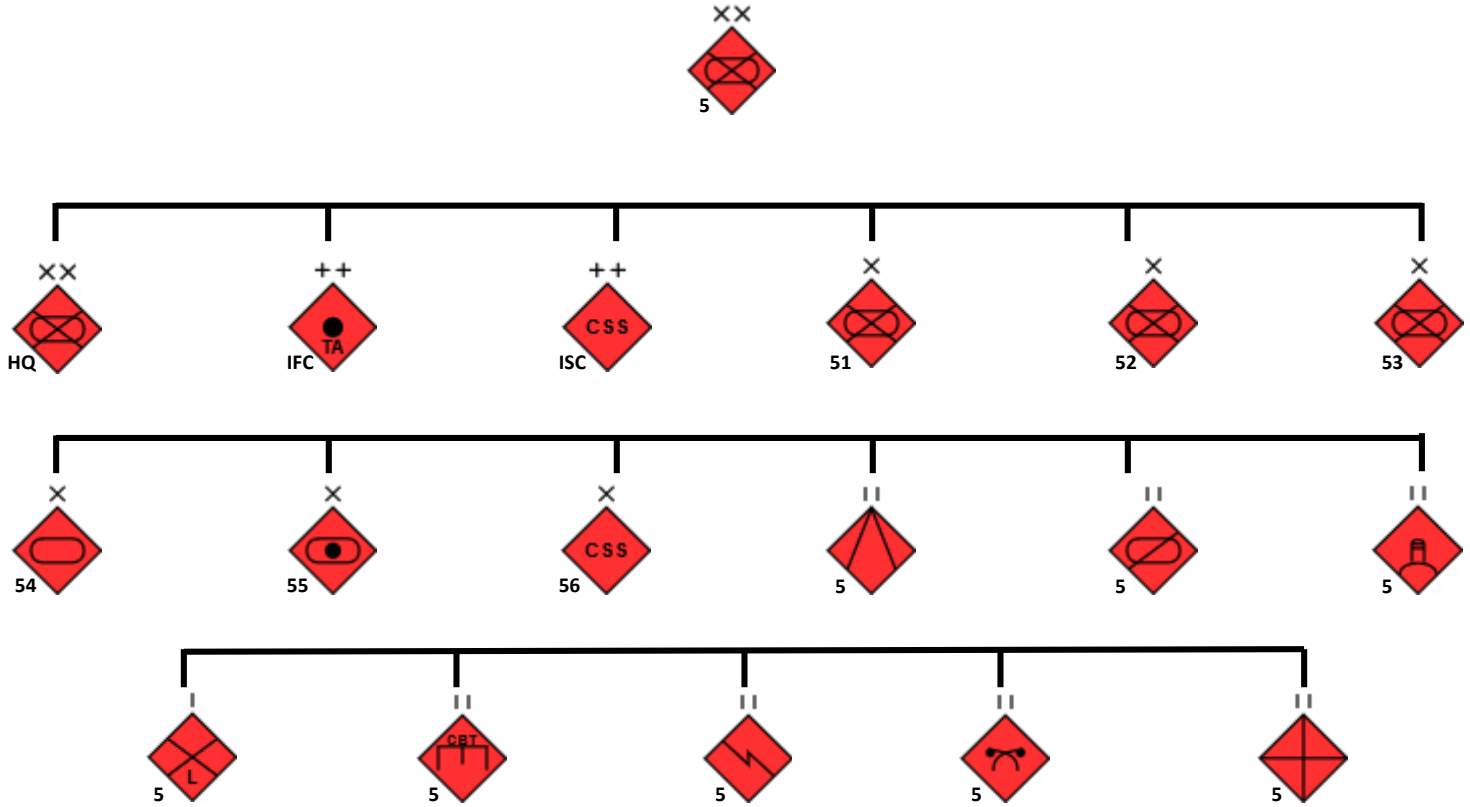
Very capable of employing AD, arty and EW assets in an A2AD/IADS strategy based on the Donovian Snow Dome strategy.

Chungjang (Major General) Ping Min-Ki
Commander 4 MECH INF DIV (IFV)



DOB	02 Jan 1975
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Santiago, North Torbia
Education	Torbian Military Academy (Baguio) – 1996 (commissioned into Artillery)
Religion	N/A
Marital Status	Unknown
Personality Traits	• Sycophantic • Orthodox in thinking • Adheres rigidly to doctrinal tenets
Biography	Not much is known about Ping Min-Ki. Ping has followed his mentor, Song Tae-Hee , through various postings and is deeply loyal to him. His adherence to TPA doctrine has had a stabilising effect on many of Song Tae-Hee's more creative thinking processes in the past.

NORTH TORBIA – 5 MECH INF DIV (IFV)



ASSESSMENT

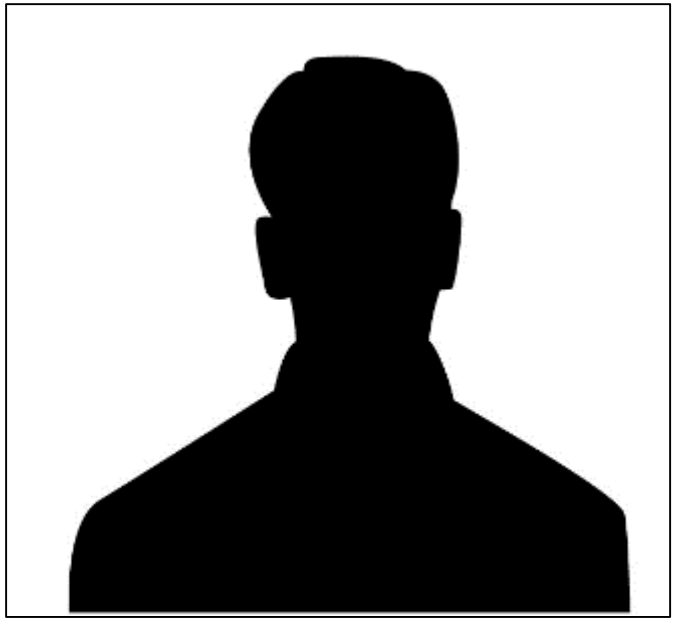
Currently in defensive posture IVO of Rosales.

Combat capability assessed at less than 50% and will require reinforcements to continue assault south to Manila.

Likely to conduct aggressive defence of Rosales and surrounds employing urban operations and rely on its enablers to defeat opposing forces while it reconstitutes.

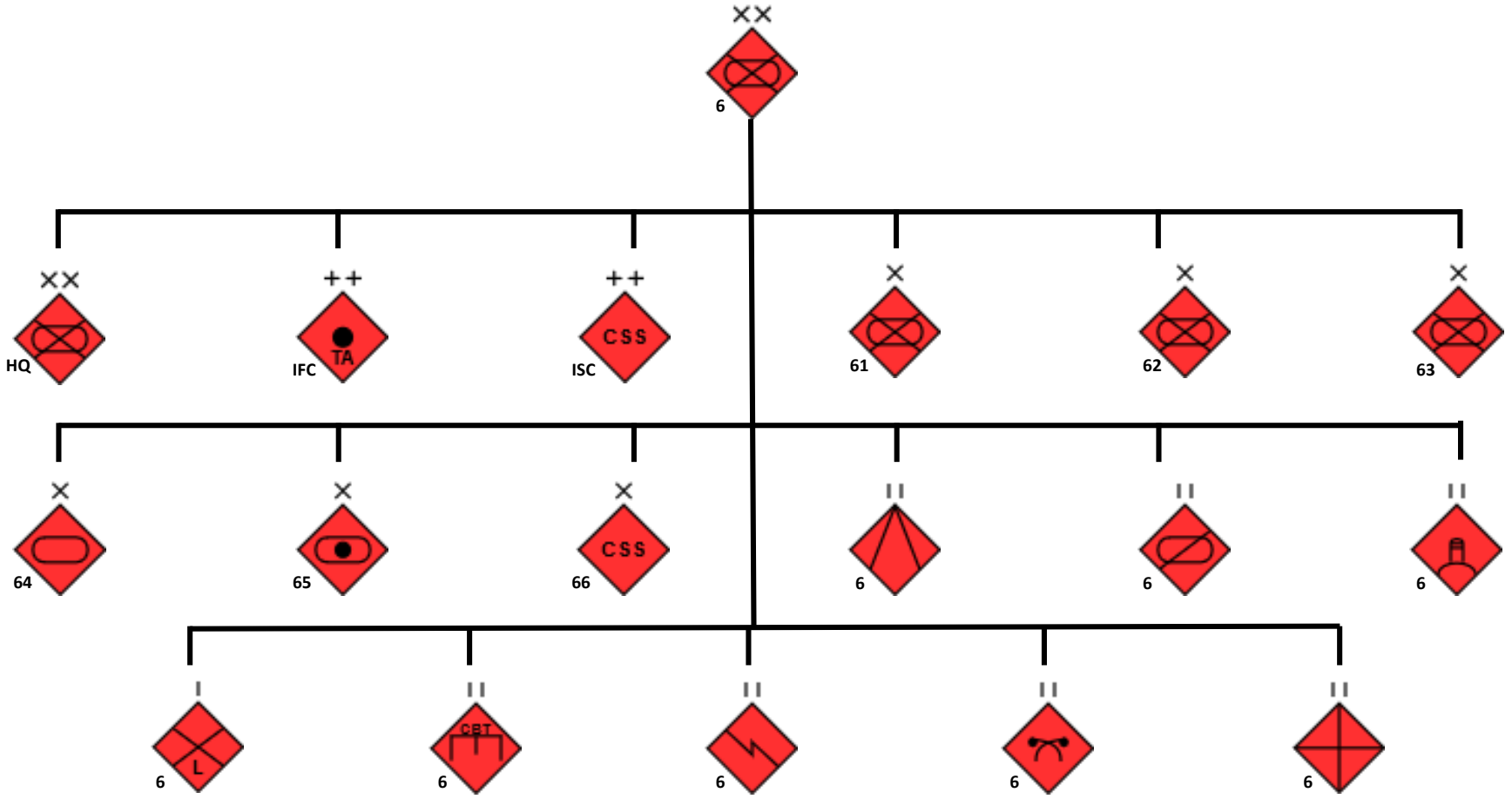
Very capable of employing AD, arty and EW assets in an A2AD/IADS strategy based on the Donovian Snow Dome strategy.

CHUNGJANG (MAJOR GENERAL) KO BYUNG-HOON COMMANDER 5 MECH INF DIV (IFV)



DOB	03 Mar 1984
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Tabuk, North Torbia
Education	Torbian Military Academy (Baguio) – 2006 (commissioned into Infantry)
Religion	N/A
Marital Status	Single
Personality Traits	• Sycophant • Ambitious / Politically connected
Biography	Ko Byung–Hoon is the youngest of 3rd Marine Brigades battalion commanders and is suspected of gaining the position due to his Party political connections. There is very little confidence in his abilities by Ping Min-Ki (Commander 6 MECH DIV).

NORTH TORBIA – 6 MECH DIV (APC)



ASSESSMENT

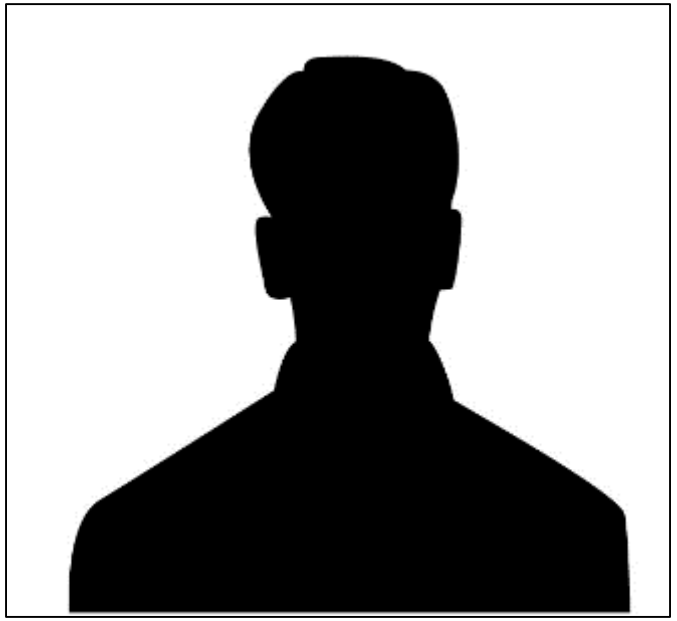
Currently in defensive posture IVO of Cabanatuan with two bde forward south of the city.

Combat capability assessed at less than 50% and will require reinforcements to continue assault south to Manila.

Likely to conduct aggressive defence of Cabanatuan employing urban operations and rely on its enablers to defeat opposing forces while it reconstitutes.

Very capable of employing AD, arty and EW assets in an A2AD/IADS strategy based on the Donovian Snow Dome strategy.

Chungjang (Major General) Kam Ji-Tae
Commander 6 MECH INF DIV (APC)



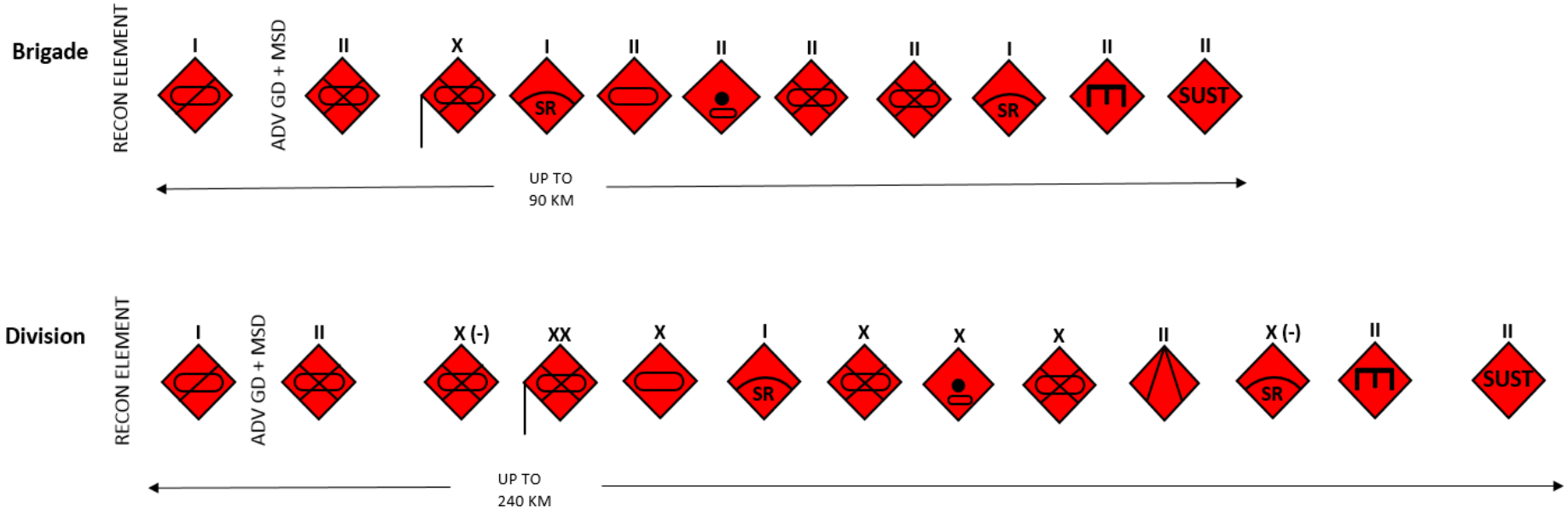
DOB	26 Sep 76
Nationality	North Torbian
Service / Organisation	TPA
Birthplace	Santiago, North Torbia
Education	Torbian Military Academy (Baguio) – 2002 (commissioned into Infantry)
Religion	N/A
Marital Status	Married 2007 – Spouse unknown Children – unknown
Personality Traits	• Methodical • Orthodox thinking
Biography	Not much is known about Kam Ji-Tae. Very little media profile or appearance

ADMINISTRATIVE MARCH FORMATIONS AND TYPICAL COLUMN LENGTHS

Space Occupied by Formations. The following diagrams are examples of brigade and division administrative march formations. Preferably, brigades would move on two routes with battalions in column; the division would move on two to three routes with brigades in column. Depending on routes available, terrain, day or night conditions, and task organization, the formations can be longer or shorter than illustrated.

The top diagram represents the possible formation taken by a Mechanized Infantry Brigade (Mech Inf BDE or MIB) on a single axis of advance. The lower diagram represents a Mech Inf Division (MID) on a single axis of advance.

The Movement Support Detachment (MSD) role within the Advance Guard (ADV GD) conducts route reconnaissance (RECON), build and repairs routes, and prepares passages across manmade and natural obstacles. RECON Element represents elements of BN RECON &/or other specialist RECON if required.

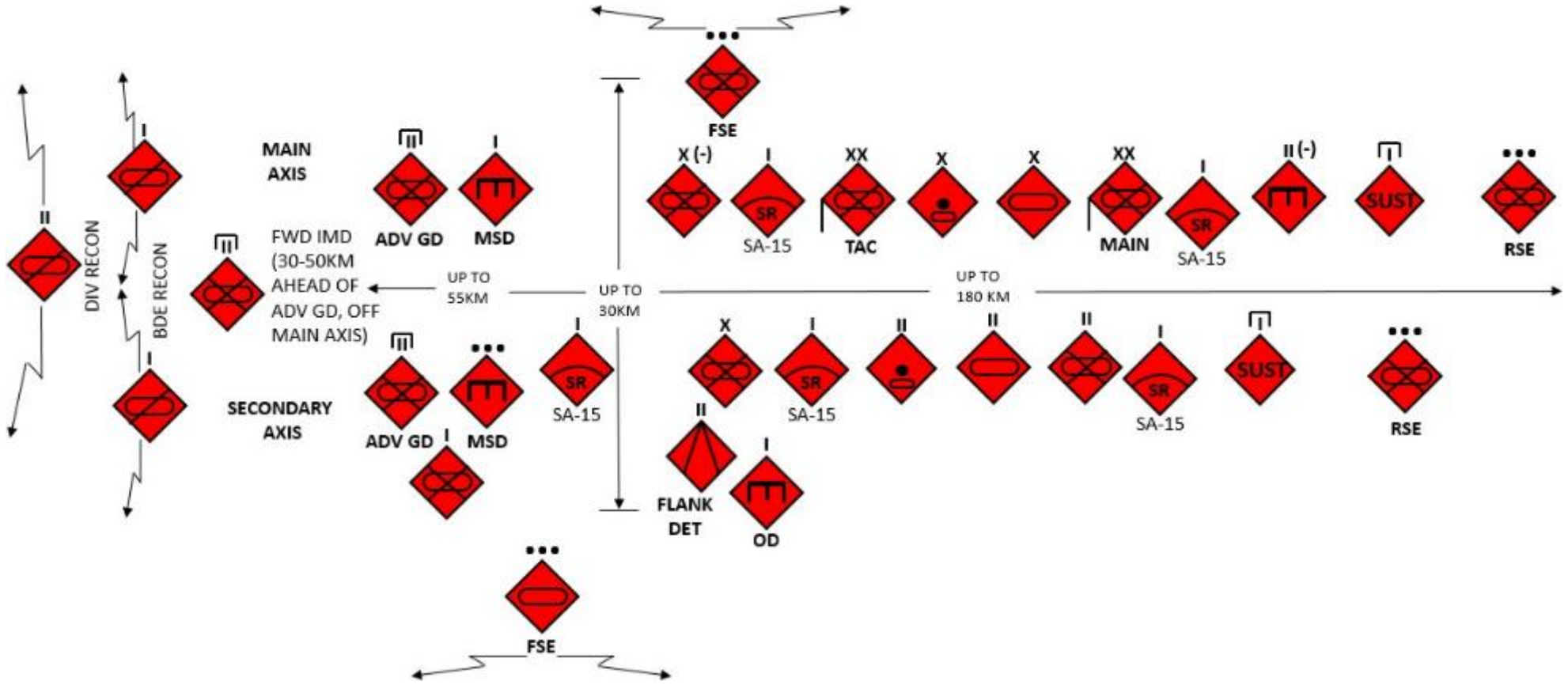


All distances dependent on METT-TC factors

MECHANIZED INFANTRY DIVISION TACTICAL MARCH FORMATION

This diagram represents the possible formation taken by Mech Inf DIV (MID), advancing on two axes, a Main and a Secondary. Flank Security Elements (FSEs) are positioned on both flanks, covering the Main and Secondary axis from potential enemy action.

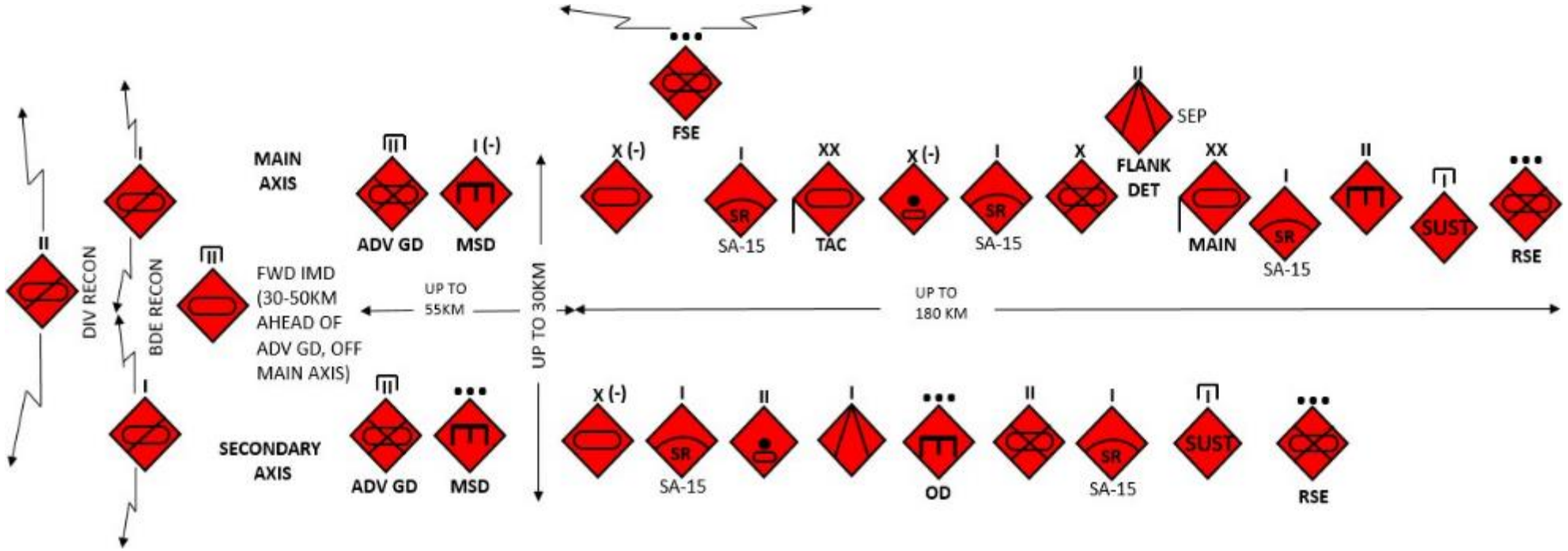
Due to the METT-TC factors the MID CDR has detached a Mech Inf PLT as FSE to his right flank and a Tank (TK) PLT with an AT BN & Obstacle Detachment (OD) to his left flank.



All distances dependent on METT-TC factors

TANK DIVISION TACTICAL MARCH FORMATION

This diagram represents the possible formation taken by the lead elements of a Tank (TK) DIV, advancing on two axis, a Main and a Secondary. A Flank Security Element (FSE) is positioned to protect against a perceived potential enemy threat on the right flank of the Main axis.

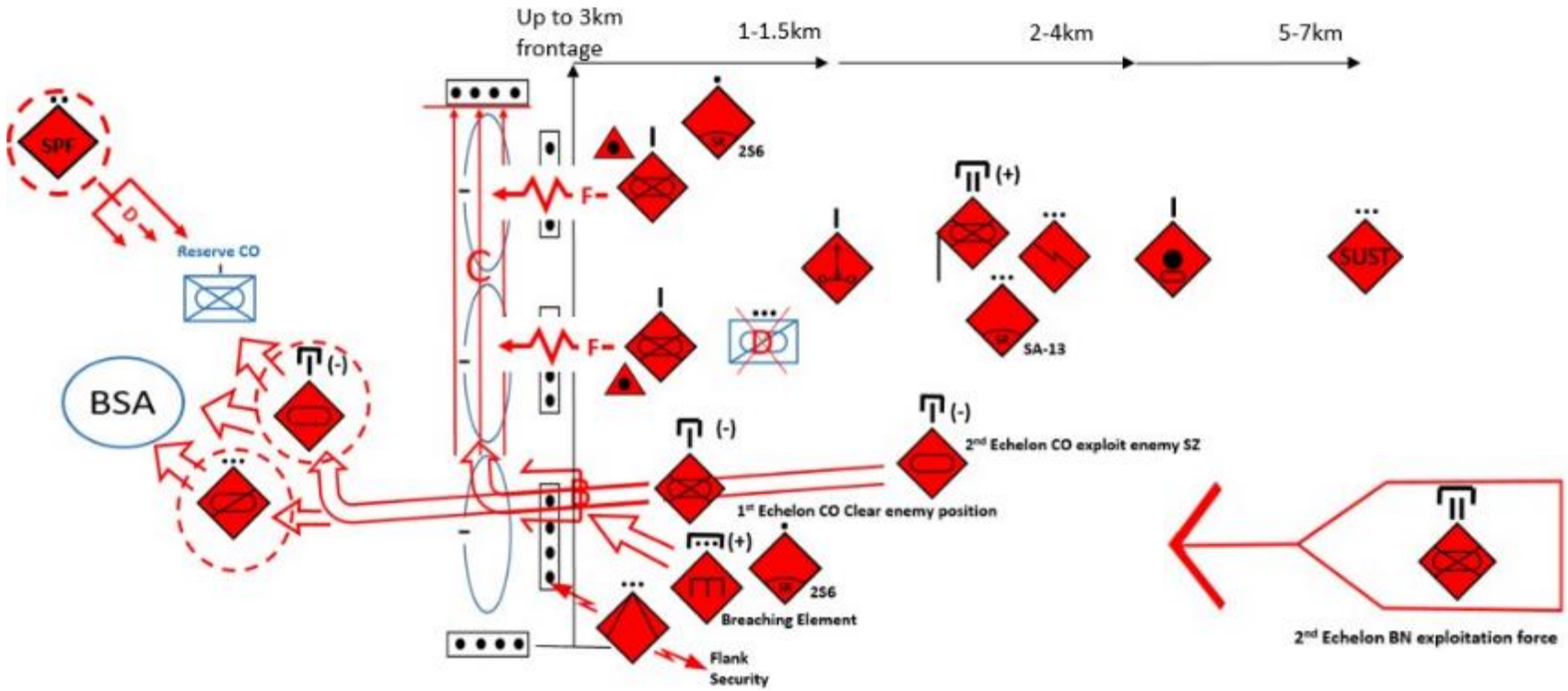


All distances dependent on METT-TC factors

BATTALION ATTACK FROM A POSITION OF DIRECT CONTACT (INTEGRATED ATTACK)

The diagram below depicts a 1st echelon Mech Inf BN fixing an enemy (BLUFOR) BN and subsequently creating a breach in the enemy defensive line (this may require additional obstacle clearing element from BDE). The 1st echelon COs fix the enemy until the breach is achieved, at which point the 1st echelon CO supporting the breaching effort exploits the breach & moves to clear the enemy from their position. Once this is underway the 2nd echelon Tank CO and reconnaissance elements further exploit the breach, moving into the enemy Security Zone to engage/destroy the enemy reserve or other high value targets. Creating disorder & disruption throughout the enemy formation. Additional Army/Corps assets, such as SPF, or SS-26 ballistic missiles (ISKANDER, see page 50, for further details) may pose an additional rear area threat.

The 2nd echelon Mech Inf BN is directed to further exploits the breach in enemy lines, driving deeper into the enemy position.

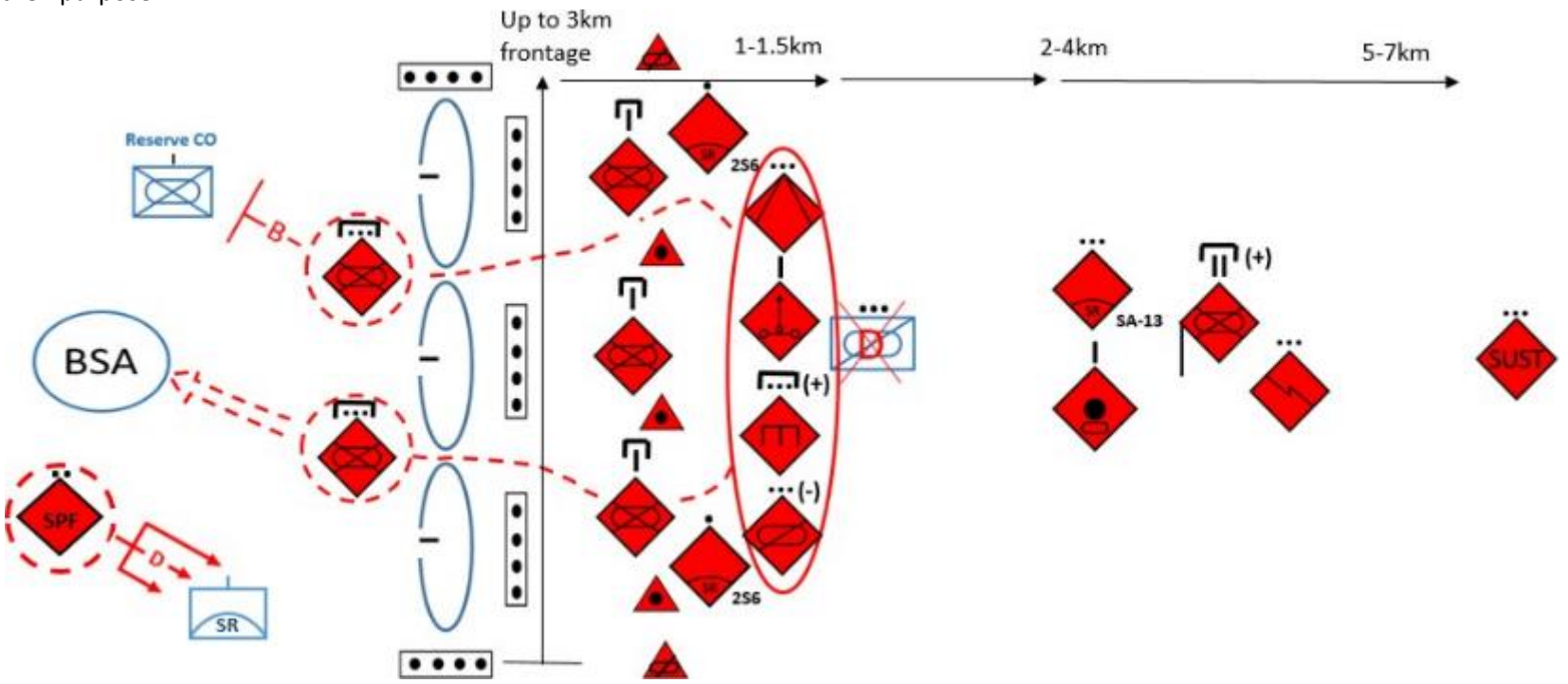


All distances dependent on METT-TC factors

BATTALION ATTACK FROM A POSITION OF DIRECT CONTACT (DISPERSED ATTACK)

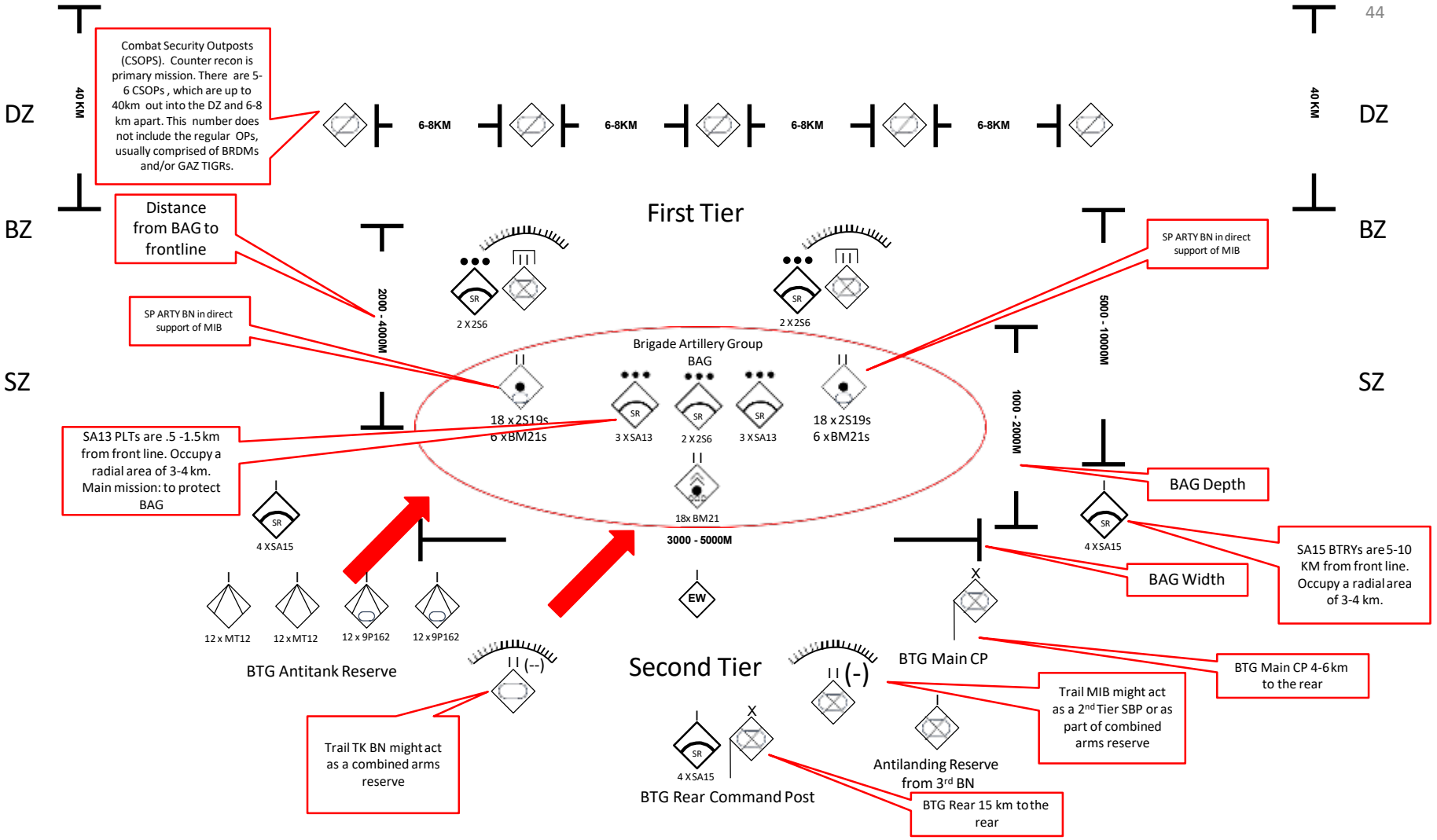
The diagram below depicts a 1st echelon Mech Inf BN conducting a dispersed attack against an enemy (BLUFOR) BN. All three 1st echelon COs, reinforced with armor, fix the enemy to find & exploit weaknesses in the enemy defenses. Anti-Tank, Engineer, & Reconnaissance elements are available to aid in fixing the enemy and to support 1st echelon CO exploitation opportunities. Once friendly forces infiltrate through enemy weaknesses, they could block enemy reserves from supporting enemy troops already in contact; identify/ destroy the enemy BSA or other high value targets (HVTs). Additional Army/Corps assets, such as SPF, may pose an additional rear area threat.

If a specific enemy asset (HVT) or location was the target of this attack, it could function as a 'limited objective' attack. A limited objective attack seeks to achieve results critical to the battle plan or even the operational plan by destroying, denying or degrading enemy key capabilities. There are two types of tactical limited-objective attack: 'spoiling attack' and 'counterattack.' Both of these attacks share some common characteristics, but differ in their purpose.



All distances dependent on METT-TC factors

BRIGADE TACTICAL GROUP IN AN AREA DEFENSE



All distances dependent on METT-TC factors

SNOW DOME

IADS/Tac A2AD

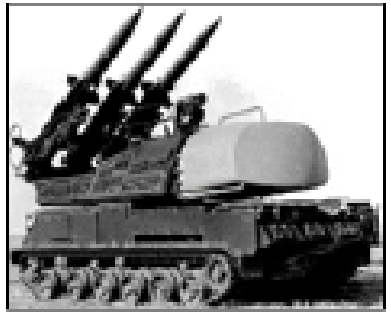
BACKGROUND

Instead of viewing air defence as essentially a backup to fixed-wing air superiority aircraft, OPFOR considers its air defences systems as a critical capability at all echelons.

The development of air defence systems, particularly mobile, tactical-level systems, throughout the Cold War and into the 21st century was seen as a key priority by OPFOR such as Donovia.

The objective of this investment was to create a volume of airspace, colloquially referred to as the “Snow Dome”, that would be denied to even the most advanced aircraft.

This demands opposing ground forces close distances with OPFOR units through a phalanx of rocket and tube artillery, anti-tank fire, and electronic attack without decisive air power in support.



DEFENSE-IN-DEPTH IN THE AIR DOMAIN

Defence-in-depth is not a new technique, either in ground combat or in the air domain. The degree of depth and level of integration seen in Donovian formations, however, represents a significant and as-yet untested challenge.

There are multiple kill options for nearly every range, altitude, and target type; sensors are largely overlapped and redundant; while mobility on the ground and other survivability measures complicate suppression of enemy air defence (SEAD) efforts.

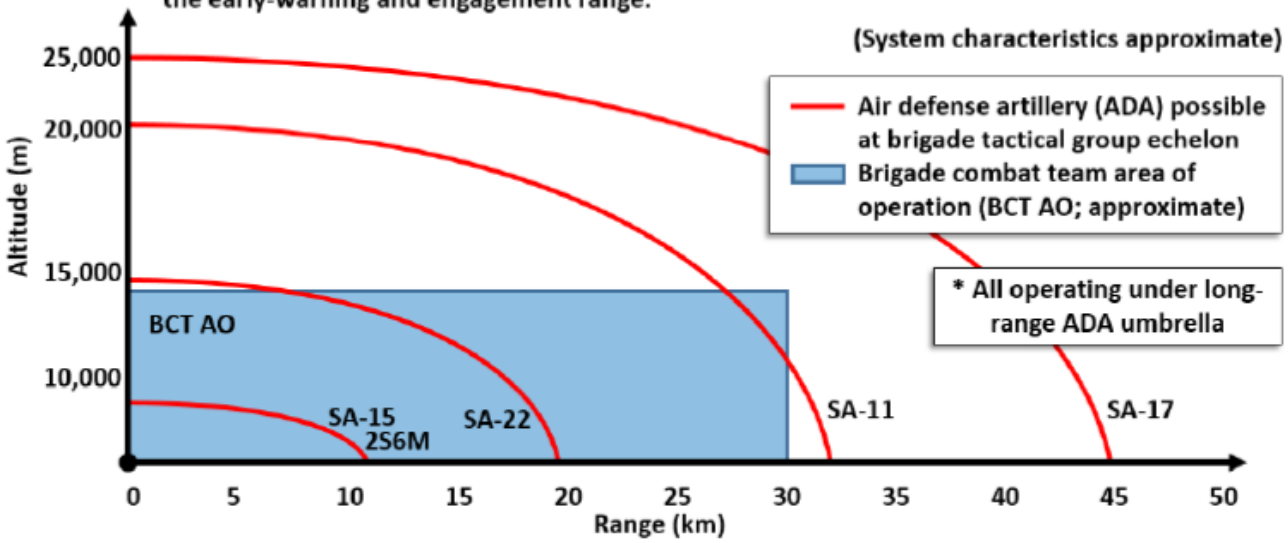
AD systems are defended against ground and artillery attack by interwoven surface-to-surface and manoeuvre elements, and against cyber attack by dedicated cyber-warfare elements. The end result is a suite of capabilities that is intended to effectively project power into the air domain from the ground, thus creating air superiority.

AD artillery component of this strategy consists of:

- Man-Portable Air Defence Systems (MANPADS)
- Mobile Short-Range Air Defence (SHORAD) Systems
- Medium-Range Air Defence Systems

COMPARISON OF SAM ENGAGEMENT RANGES AND BRIGADE AO

- IADS integrates strategic, operational, and tactical assets under unified command and control.
- Firing systems (without active early-warning systems) may not be detected.
- Integration of new communications technology provides automated control in order to extend the early-warning and engagement range.



Source: Red Diamond Threats Newsletter Vol 8 Issue 10 October 2017

MAN-PORTABLE AIR DEFENCE SYSTEMS (MANPADS)

MANPADS represent the shortest range/lowest altitude tier of the larger air defence network, responsible for defending manoeuvre formations and other forward units, while “pushing up” faster and more-capable aerial threats to enable their engagement by more-capable, longer-range air defence systems.

MANPADS are employed to:

- Engage and defeat low and slow aerial targets
- Deter or canalize higher, faster, and more-capable targets.

They are issued widely such that practically every manoeuvre battalion has a MANPADS element. They are often employed in a decentralized manner.

MANPADS are easy to conceal, to move, and to operate. The biggest challenge in their employment is controlling their fire: identifying targets properly and coordinating shots across multiple shooters.

MOBILE SHORT-RANGE AIR DEFENCE (SHORAD) SYSTEMS

SHORAD systems are employed to:

- Move with and provide coverage to manoeuvre elements
- Deny the use of tactical airspace over wide areas to low-altitude aircraft
- Protect longer-range fires systems by intercepting both threat aircraft and munitions

Lighter infrared (IR) SHORAD systems (SA-9/13/Gibka-S) are employed in much the same way as MANPADS, with two key differences:
they are mounted for enhanced mobility vice man-portable systems and
they are easier to integrate, as vehicles can easily carry network and communications equipment.

They are well-suited to traveling with, and defending, manoeuvre units on the move. These systems either do not have organic radars or their on-board radars are fairly limited; as such they are reliant on network early warning coupled with visual target detection and identification. They generally do not have the capability to successfully engage in-flight munitions, so their primary target set is UAS and rotary-wing aircraft. In the context of the wider IADS, light SHORAD is used to provide point defense to moving assets, to fill in gaps between heavier systems, and to create overlapping coverages with MANPADS elements.

MEDIUM-RANGE AIR DEFENCE SYSTEMS

Medium-Range Air Defence Systems use a combination of range and mobility to defeat suppression of enemy air defence (SEAD) efforts while defeating or deterring attacks by aircraft on ground forces.

They are also used to detect and defeat threat munitions as well as defend long-range fires systems from SEAD/counterfire efforts.

They are able to rapidly emplace/displace, to move quickly, and the relatively small signature of the medium-range systems make them far more difficult to effectively target with SEAD fires.

Medium-range systems (SA-6/11/15/17) fill a more traditional IADS role, engaging targets of all types (to include short range ballistic missiles), and defending fairly large areas from air and missile attack while retaining sufficient mobility to move along with manoeuvre forces.

These systems use large, fast interceptors that have a claimed range in excess of 30 km. They are employed as battalions organic to field army-level air defence brigades. Units then disburse individual batteries or even individual TELARs to lower-echelon manoeuvre units.

Medium-range systems represent the most lethal and dangerous element of Russian tactical air defenses: they can successfully engage fast-moving targets, including fixed-wing aircraft and munitions. Their performance, especially their standoff range and lethality, coupled with their mobility makes them challenging targets to detect and engage. Medium-range systems are used extensively to defend longer-range, heavier fires systems from SEAD and counterfire efforts.

COMBINING THE THREE AIR DEFENCE SYSTEMS

This assortment of systems is deployed using a combined-arms philosophy.

- MANPADS are used to defeat less-challenging targets and to deter or canalize more-capable targets.

- Light SHORAD systems are used to fill in gaps in MANPADS coverage and to protect moving assets from short-range attack and surveillance.

- Heavy SHORAD systems are used to protect high-value moving targets; to deny, deter, or canalize challenging low-altitude targets; and to detect, engage, and destroy threat munitions targeting high-value fixed or semi-fixed assets.

- Medium-range systems engage challenging targets that were successfully canalized or forced to higher altitudes; destroy threat munitions; and defeat or deter attack across wider geographic areas.

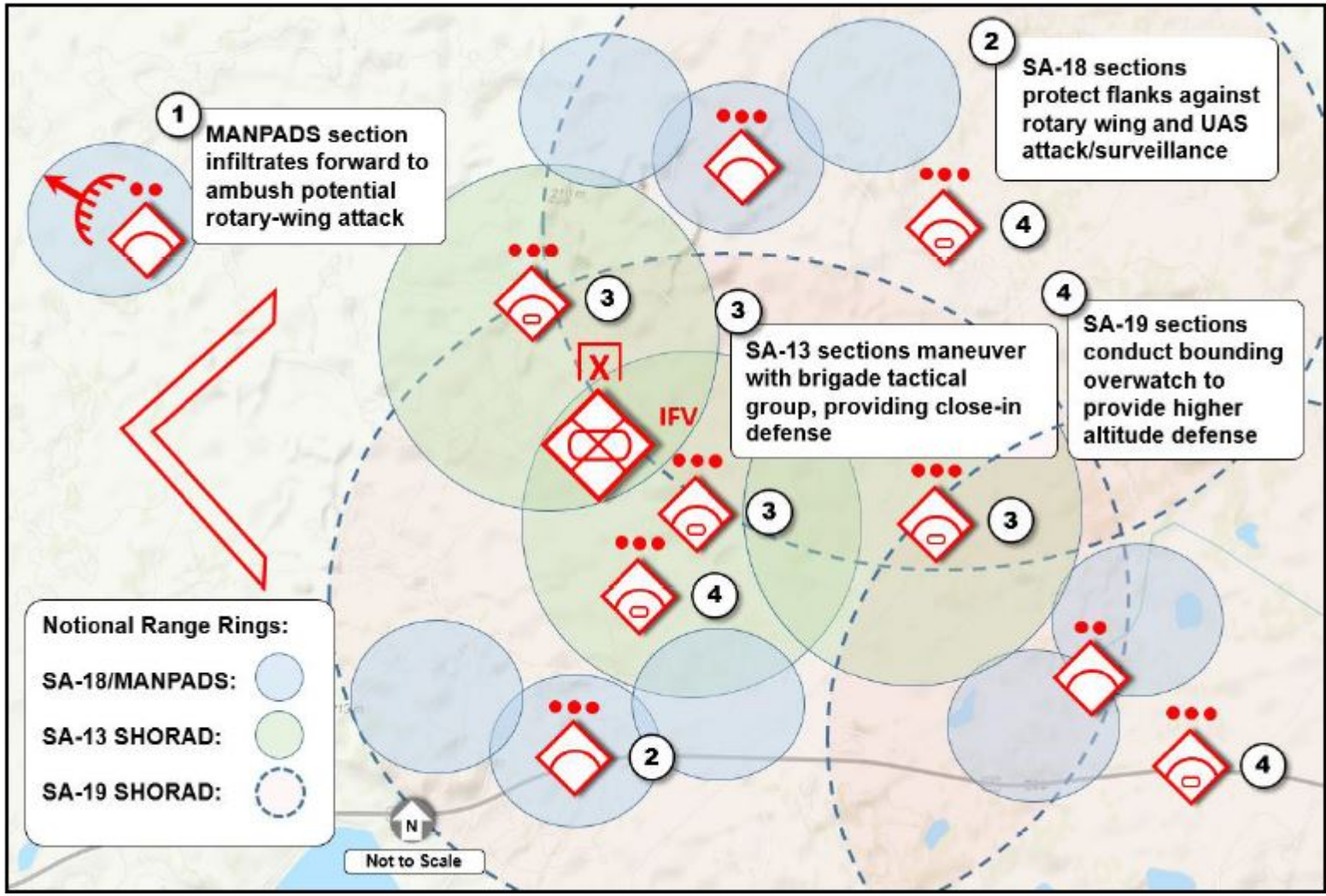
AIR DEFENCE-IN-DEPTH ON THE MOVE

This diagram depicts mechanised brigade's deployment of organic air defence assets during a ground movement. The air defence battalion consists of SA-18 and 9K333 MANPADS sections, a battery of SA-13, and a battery of SA-19.

In the context of the snow dome, this mixture of capabilities accomplishes three primary objectives:

- Defending valuable long-range surface-to-surface (bm-30/ss-26) and surface-to-air (sa-10/20) systems from long range counterfire and SEAD
- Denying use of tactical airspace to opposition fixed-wing, rotary-wing, and unmanned systems
- protecting moving ground elements from aerial attack and surveillance.

Ultimately, this combined arms, defence-in-depth effort is intended to draw the opposition into an artillery fight, where it is hoped that the advanced targeting capabilities and weight of fire of artillery systems will prevail.



Source: Red Diamond Threats Newsletter Vol 8 Issue 06 June 2017

OFFICIAL

ARTILLERY AS A COMPONENT OF THE SNOW DOME

Surface-to-surface fires are a key component of the tactical and operational area-denial suite of capabilities of “Snow Dome.”

Artillery provides this capability, while surface-to-air fires interdict or deter threat airpower, and electronic warfare and cyber warfare elements interfere with threat sensors and networks.

The Snow Dome concept essentially seeks to bring enemy manoeuvre forces into an artillery battle, where the superior weight of OPFOR artillery can decisively engage before the enemy can close with and engage OPFOR forces in close combat.

OPFOR Ground Forces utilize a variety of systems, with varying ranges, yields, and precision, to create something of a combined arms effect with their artillery.

OFFICIAL

SELF-PROPELLED ARTILLERY AND MULTIPLE-ROCKET LAUNCHERS

Self-propelled guns (SPGs) are the mainstay of a contemporary field artillery capability. They are used in every artillery role and are present in significant numbers in practically every formation.

Their most significant roles, however, are direct support to manoeuvre units and counter-battery.

Field artillery brigades also feature large numbers of SPGs that provide a fast-moving artillery capability, allowing the brigade to mass fire at decisive points on the battlefield.

Rocket systems are employed in concert with enhanced target acquisition (notably by drones and irregular forces) to devastating effect against a variety of target types.

They are used as reinforcing fires, counterfire, and as the decisive component of artillery offensive action against exposed manoeuvre forces

SURVEILLANCE AND TARGETING

UAVs are only one component of a network of sensors in the reconnaissance fires complex.
Forward observers (FOs), usually operating in artillery reconnaissance sections, remain a critical enabler for artillery at all echelons. FOs can be assigned to virtually any unit and can be employed in a centralized manner (e.g., reporting to a fire direction cell) or decentralized (e.g., tied directly to a specific shooter).

FOs direct both cannon and rocket fires. Some—particularly mounted FOs—employ digital data links to shooters, but many still utilize voice communications and analogue (e.g., paper map) technology. Untrained observers in irregular forces can be tied into the sensor network, reporting through trained FOs, or can use commercial communications networks and technologies to call for fire.

UAVs are employed in much the same way as FOs: they are operated at relatively low tactical echelons (brigade/battalion) and are typically tied directly to a specific shooter, most often a rocket battalion. This enables rapid targeting, as the UAV operator can pass target data directly to the shooters, who can then fire with minimal clearance and authorization.

OPFOR also makes use of electronic and signal surveillance, satellite imagery, and cyber surveillance, passing targeting data down to shooters or retaining data to inform more centralized operations.

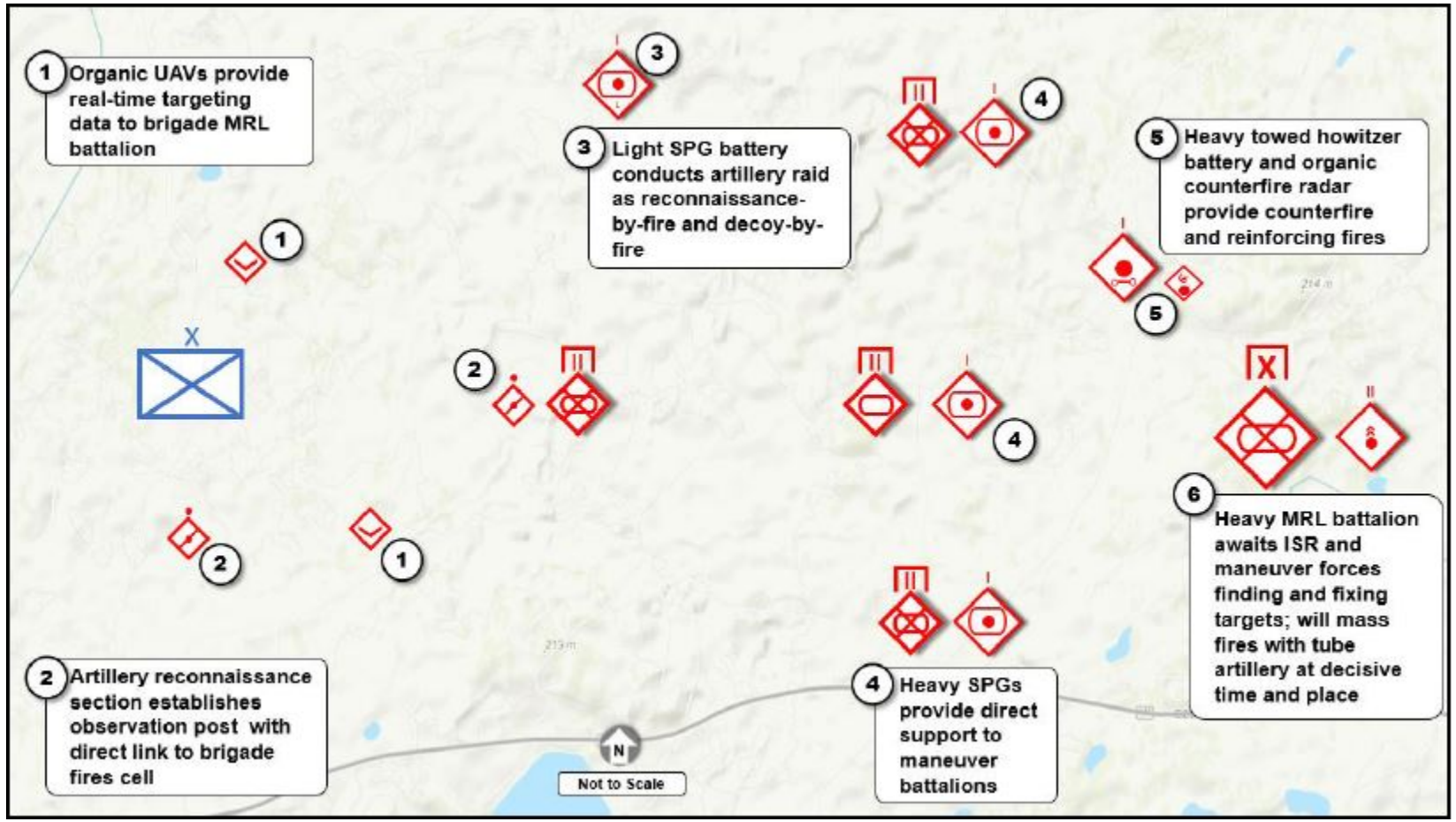
ARTILLERY ON THE MOVE

This diagram depicts a mechanised brigade attacking an entrenched infantry brigade. Battalion tactical groups (BTGs) are established consisting of a manoeuvre battalion and other task-organized forces. Each BTG is allocated a battery of SPGs in direct support; BTG commanders utilize them to suppress or destroy targets in support of the BTG.

The brigade retains its rocket battalion, an SPG battery, and the reinforcing heavy towed howitzer battery, which are centrally controlled by the brigade commander.

In the context of the Snow Dome, this mixture of capabilities accomplishes three primary objectives:

- Defending valuable long-range surface-to-surface and surface-to-air systems from long range counterfire and SEAD
- Denying the use of tactical airspace to opposition fixed-wing, rotary-wing, and unmanned systems
- Protecting moving ground elements from aerial attack and surveillance.



Source: Red Diamond Threats Newsletter Vol 8 Issue 08 August 2017

SNOW DOME

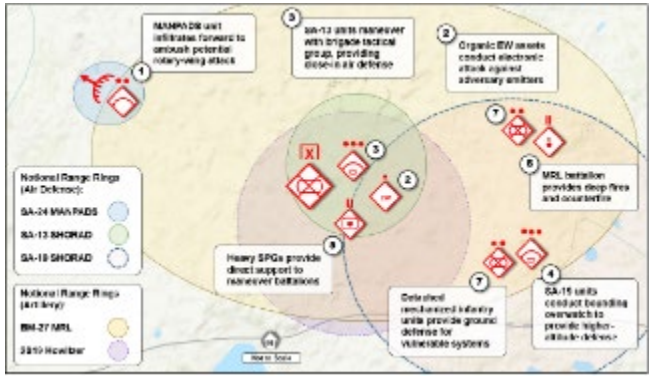
Snow Dome is a set of mutually supporting capabilities that create a combined arms effect intended to deter enemy attack or inhibit the free accrual of enemy combat power.

Capabilities that contribute to the Snow Dome include, but are not limited to:

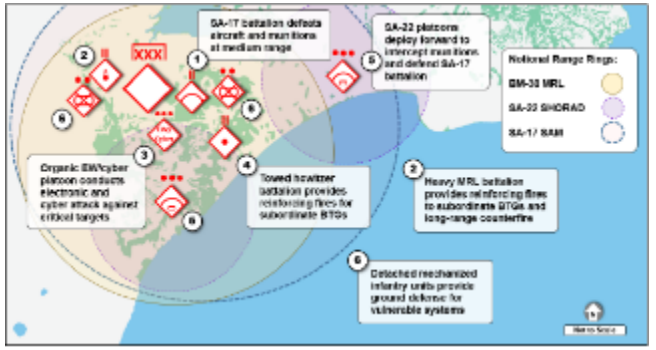
- Medium- and long-range air defence systems
- Mobile short-range air defence (SHORAD) systems
- Man-portable air defence (MANPADS) systems
- Manned and unmanned aircraft
- Tube and rocket artillery
- Direct fire/ manoeuvre systems
- Ballistic and cruise missiles
- INFOWAR with particular emphasis on cyber and electronic warfare.

Each one of these capabilities reinforces or supports others, mitigating weaknesses or gaps through all domains:

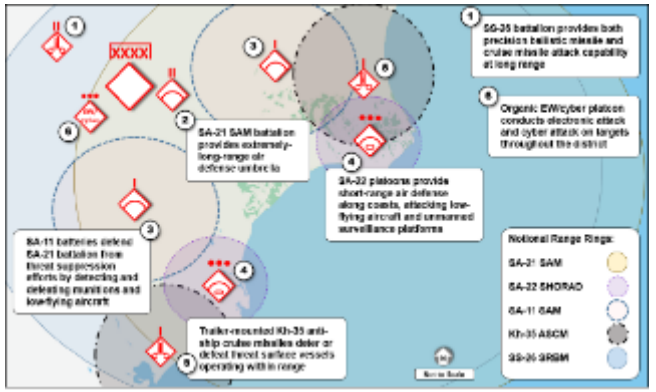
- Air defences create localized air superiority from the ground, dissuading or neutralizing air and missile attacks on ground forces.
- Artillery stands off enemy artillery and manoeuvre forces, defending fragile and highly visible air defence assets from enemy suppression efforts.
- Manoeuvre forces defend air defence and artillery forces from ground attack.
- Ballistic and cruise missiles attack the highest-value targets at extended ranges on land and at sea.
- Electronic warfare protects key systems such as radars and communications from electronic attack, while simultaneously disrupting enemy electronic emitters.
- Other INFOWAR elements reinforce the psychological deterrent effect of all forces and seek to disrupt enemy systems with cyber and information attack.



SNOW DOME AT THE TACTICAL LEVEL



SNOW DOME AT OPERATIONAL LEVEL



SNOW DOME AT THE THEATRE LEVEL

SNOW DOME BY ECHELON – BRIGADE TACTICAL GROUP (BTG)

At the BTG, the primary missions for Snow Dome participants are to disrupt the build-up of enemy combat power at the brigade level, to attrite enemy forces as they manoeuvre, and to deny the use of key terrain—particularly valuable airspace—to enemy commanders.

Key contributors at this echelon include:

- MANPADS
- SHORAD systems;
- Tube and rocket artillery
- Direct fire/manoeuvre systems
- Electronic warfare (EW)

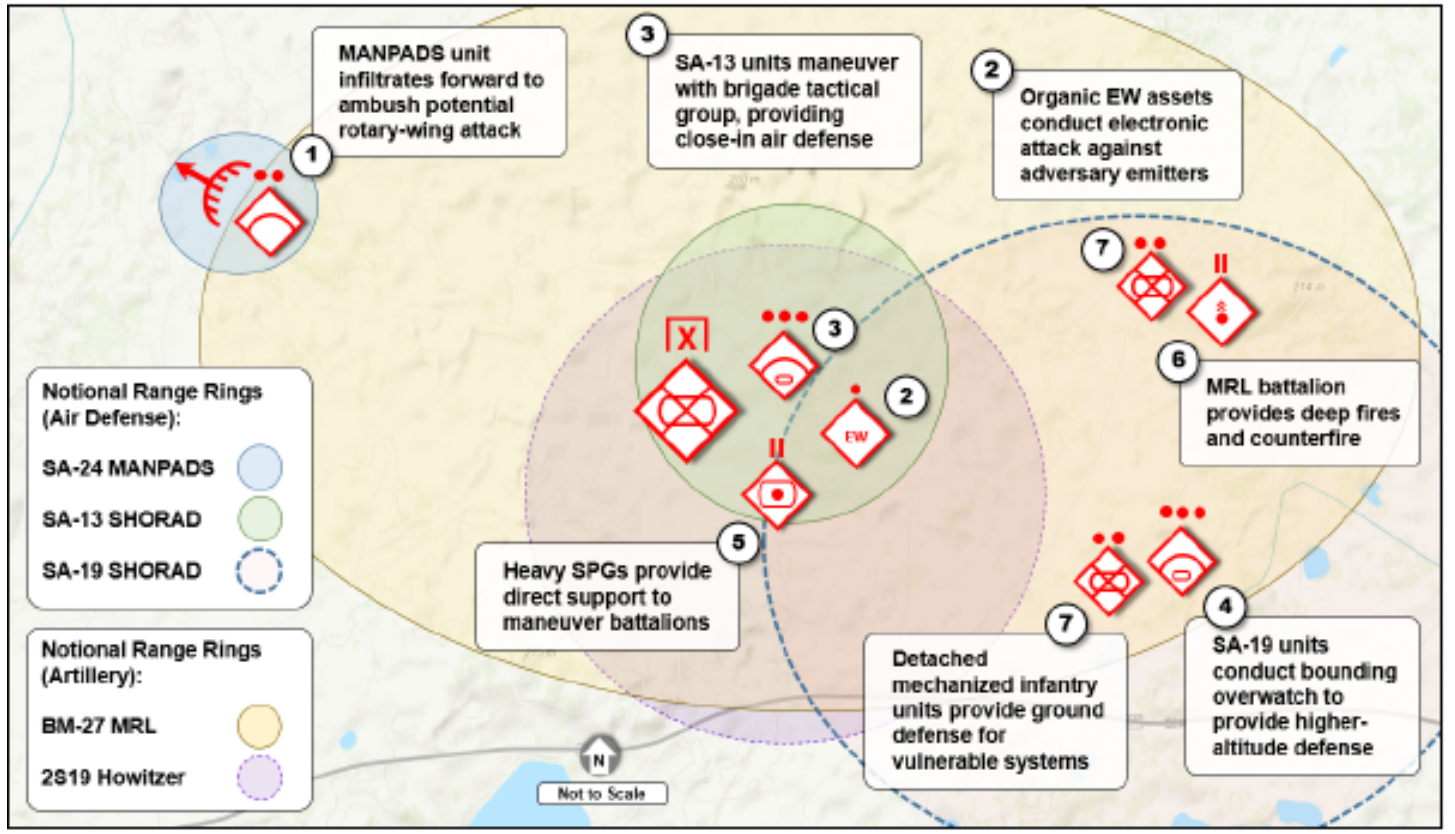
The BTG's Snow Dome extends across its AO.

MANPADS and SHORAD are used to deter or defeat low-altitude fixed- and rotary-wing air attack, and perhaps more importantly, enemy surveillance from small UAVs.

Artillery systems' primary roles are counterfire and fire support. Counterfire falls largely to rocket systems, while fire support falls to tube systems.

Manoeuvre forces defend both air defence and artillery systems from ground attack, while electronic warfare enables Russian electronic emitters while disrupting enemy systems.

The primary intent of the Snow Dome at this echelon is to disrupt enemy forces' lower echelons (battalion and below) as they attempt to close with and destroy the BTG.



Source: Red Diamond Threats Newsletter Vol 8 Issue 10 October 2017

SNOW DOME BY ECHELON – OPERATIONAL COMMAND

At the operational command weapons systems that comprise the Snow Dome are larger, more expensive, less common, and more lethal. Their primary roles are to support subordinate units (BTGs) as required and fill in spaces between BTGs.

Key contributors at this echelon include:

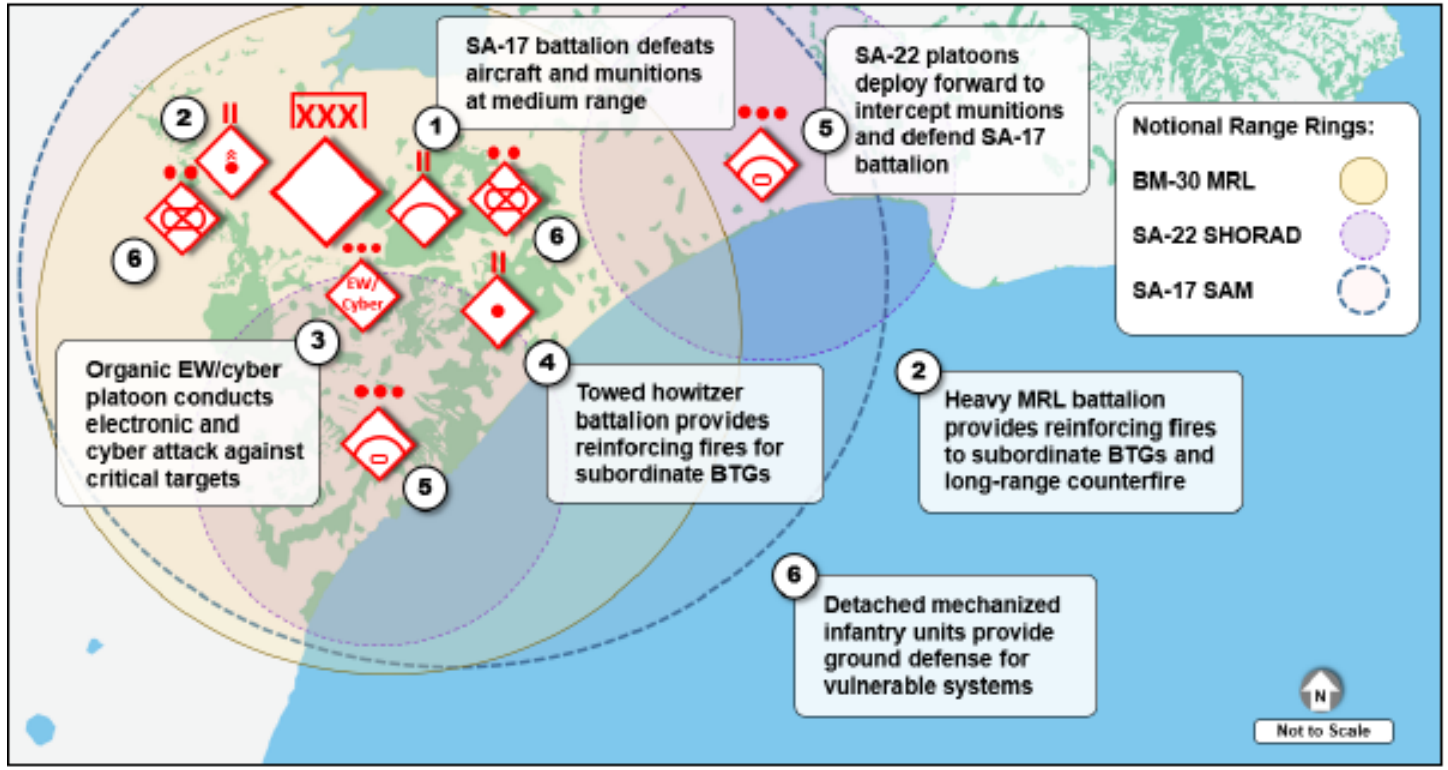
- SHORAD systems
- Medium-range air defence systems
- Tube and rocket artillery
- Direct fire/manoeuvre systems
- INFOWAR: EW and cyber warfare

Air defence systems consist of short- and medium-range missile systems.

Artillery is rocket-heavy to support the reinforcing fires mission, the counterfire mission, and the long-range precision strike mission. At this echelon, offensive systems target enemy deep critical operational-level assets such as headquarters, assembly areas, and supply areas.

This echelon introduces a cyber warfare and other INFOWAR elements that operate within the operational command AO, including a more robust EW capability.

The primary intent of the Snow Dome at this echelon is to impede brigade-sized elements from effectively concentrating combat power and from conducting resupply/reorganization, while simultaneously providing reinforcing fires to subordinate BTGs.



Source: Red Diamond Threats Newsletter Vol 8 Issue 10 October 2017

SNOW DOME BY ECHELON – THEATRE

Snow Dome extends to encompass large parts of a given AOR. Weapon systems are large, expensive, and vulnerable, but have the range and lethality to significantly affect entire campaigns.

Key contributors at this echelon include:

- SHORAD system
- Medium-range air defence system
- Long-range air defence systems
- Rocket artillery
- Short-range ballistic missile (SRBM) and land attack cruise missile
- Anti-ship cruise missile (ASCM)
- Direct fire/manoeuvre systems
- INFOWAR – EW and cyber warfare

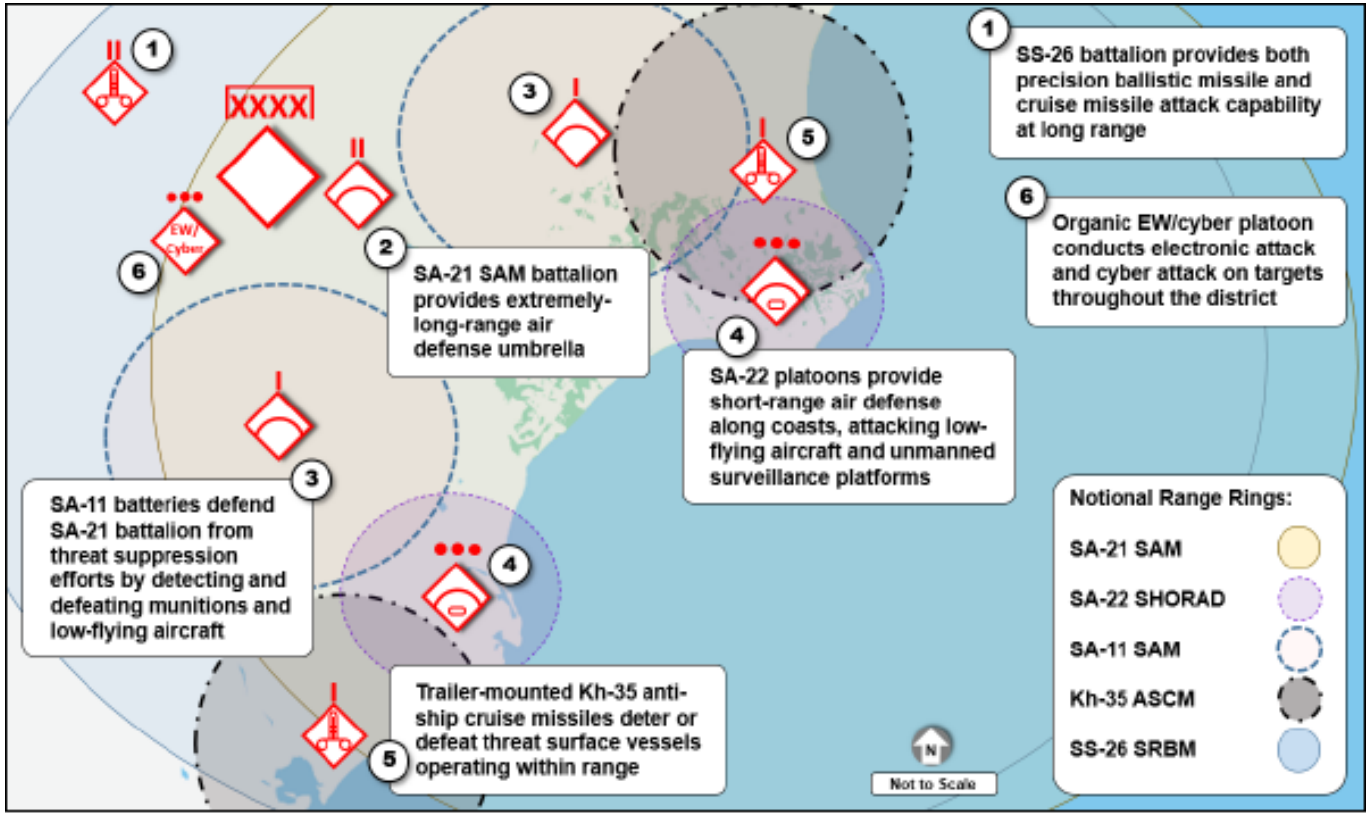
AD systems consist of medium-range systems which overlap/protect long-range systems from low-altitude air threats and munitions, while long-range systems inhibit and threaten hostile aircraft hundreds of miles away.

Long-range surface-to-surface shooters, including both rockets and ballistic missiles, stand off enemy fires systems and threaten high-value targets across the theatre.

Cyber and other INFOWAR elements are larger and more capable, ready to conduct either targeted or mass operations anywhere in the theatre.

This echelon's primary goal is to impede enemy access to the entire theatre and to restrict its freedom of manoeuvre long before the enemy can organize and close with tactical forces.

Theatre-level targets include air and seaports, major assembly areas, high-level headquarters, regional networks and communications, high-performance aircraft, and surface ships, both embarked and in port.



Source: Red Diamond Threats Newsletter Vol 8 Issue 10 October 2017

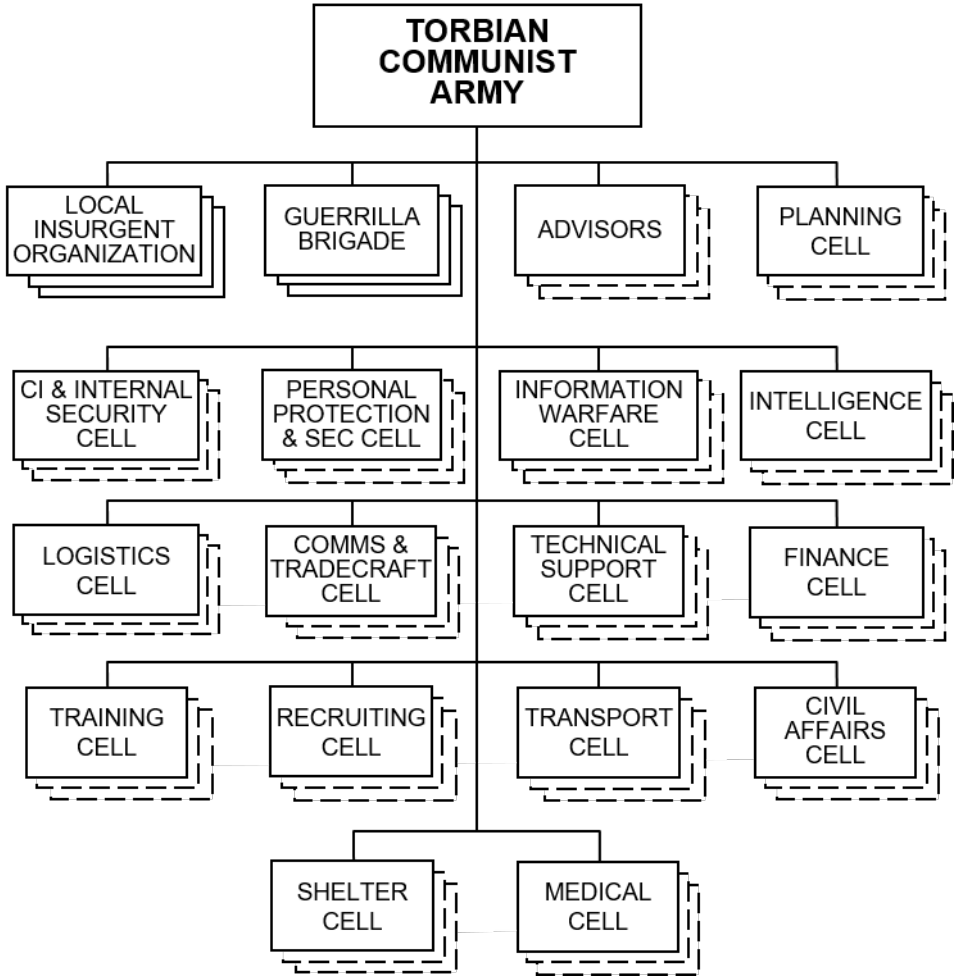
CONCLUSION

- Snow Dome is a relatively new term, the basic idea, combined arms and defence-in-depth, is as old as warfare itself.
- The challenges the Snow Dome presents are significant.
- It will impede freedom of movement throughout an operation, even at long range, and it will attrite friendly forces in a way not seen in decades.
- Without true joint combined arms operations, breaking down the Snow Dome will likely be impossible.
- This reality requires friendly forces to recognize their shortcomings in firepower, then to conceive creative and possibly asymmetric methods to defeat powerful threat A2AD capabilities.

SOUTH TORBIAN COMMUNIST ARMY (TCA)

- Insurgent organisation based in South Torbia.
- Less than 1000 active members but may have more supporters throughout the country.
- Committed to establishing a communist country based on the Marxist model and potentially linked to the south Torbian Communist Party.
- Likely infiltration by North Torbian agents/SPF members.
- Attacks government leaders and buildings as well as symbols of the government such as schools.
- Attempts to bolster its ranks by recruiting foreign migrant workers who are often taken advantage of by South Torbian businesses particularly agricultural conglomerates.
- Highly likely TCA will provide assistance to the North Torbians.

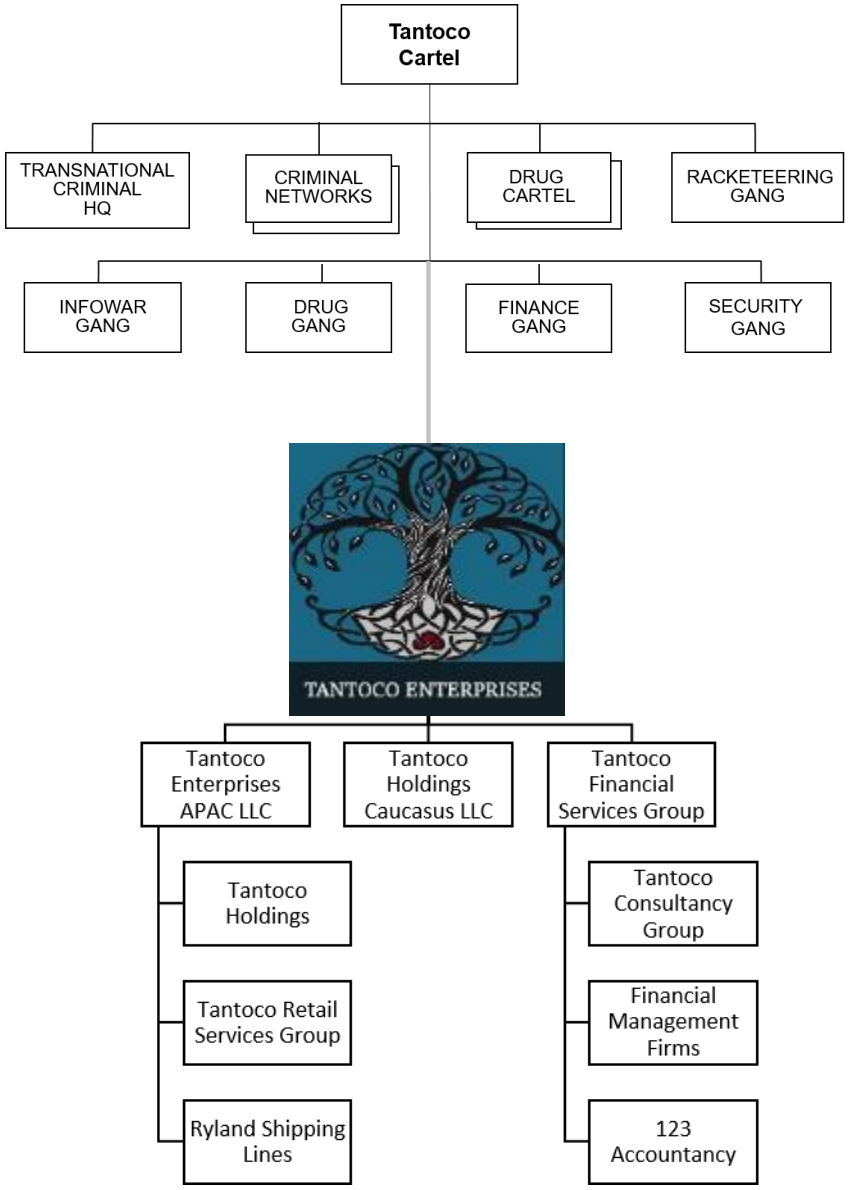
https://odin.tradoc.army.mil/DATE/Pacific/South_Torbian_Communist_Army



TANTOCO CARTEL

- Transnational criminal organisation based in South Torbia, but operating in a number of other countries including North Torbia, and potentially
- A complex and multi-layered structure.
- Involved in most criminal activities including drug and weapons smuggling, extortion, motor vehicle theft, illegal gambling, money laundering, counterfeiting, contract killing, piracy.
- Reports of attempted expansion into Australia and New Zealand .
- At the forefront of cybercrime including cyber-theft of both real and virtual assets, as well as "hacking for hire."
- A multi-generational, multi-layered organisation with its core leadership exclusively male and between the ages of 45 and 70.
- Branching out from the criminal enterprise and connected by shadow lines and buffers both human and organisational, the Tantoco Enterprises group of companies operates a variety of legitimate businesses.
- Threat to coalition forces is minimal but the Cartel may leverage off its presence in South Torbia.

https://odin.tradoc.army.mil/DATE/Pacific/DATE_Pacific_Non-State_Threat_Actors_and_Conditions/Tantoco_Cartel



TARGET VALUE MATRIX

Effect on Adversary			Target Set	Relative Worth			
Disrupt	Delay	Limit					
X		X	Submarines	X	X		
X		X	Airfields	X	X		
X		X	C3	X	X	X	X
X		X	Space, cyber EW CP	X	X	X	X
X		X	Early warning ISR assets	X	X	X	
X		X	AD CP	X	X	X	X
X		X	SAM bty	X	X		
X		X	Coastal arty bn CP	X	X	X	X
X		X	ASBM and ASM bty	X	X		
X		X	Manoeuvre elm	X	X	X	
X	X		Lines of communications	X			
	X	X	Class III POL	X	X	X	
	X	X	Class V Ammo	X	X		

4. Determining the courses of action

COURSES OF ACTION

MLCOA

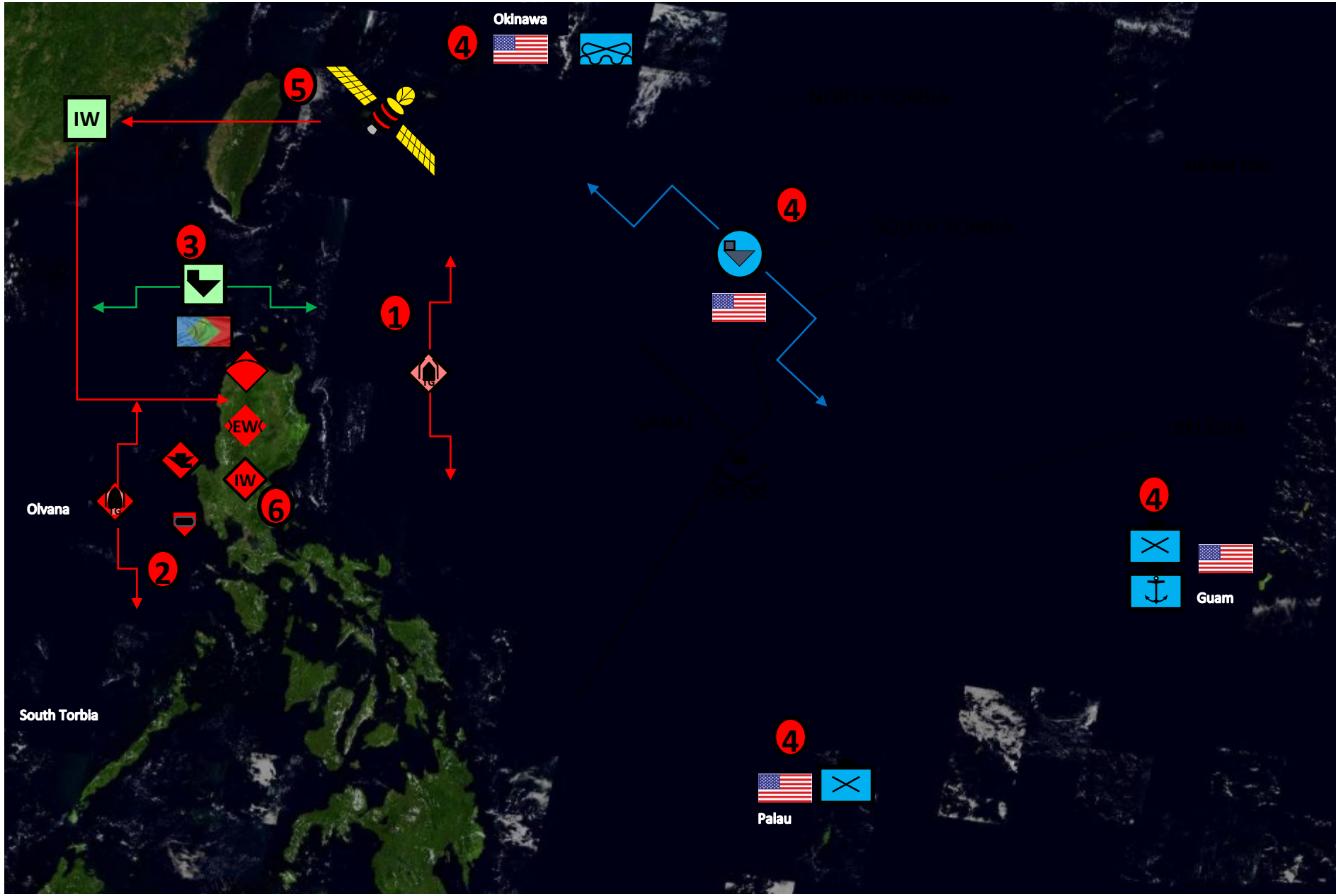
- North Torbian armed forces will employ its A2AD strategy IOT enable TPA forces to advance on Manila and unite the two Torbias.

MDCOA

- North Torbia obtains direct support from Olvana IOT to enable it to unite the two Torbias.

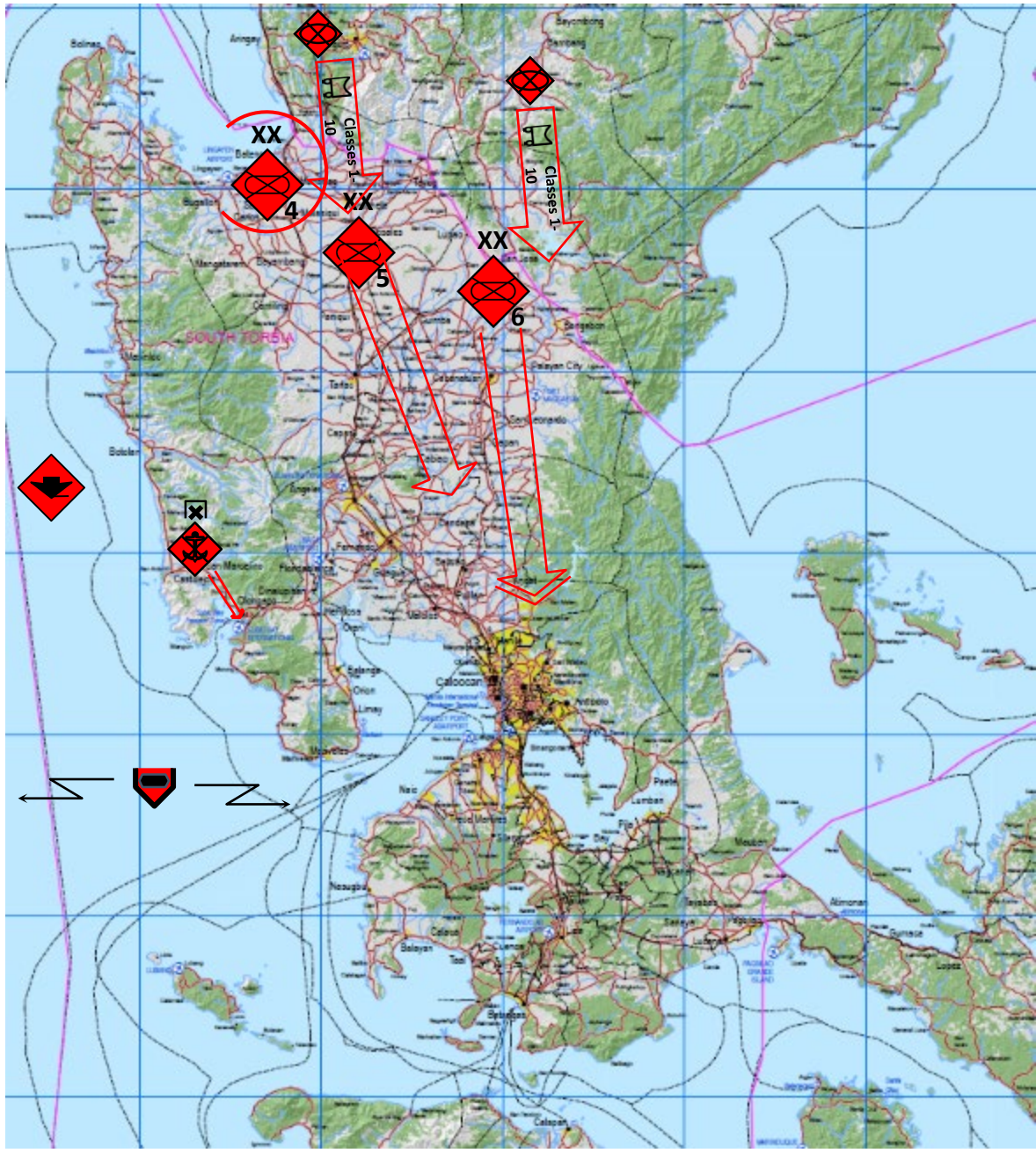
MLCOA

1. North Torbian Eastern Fleet operating as part of the North Torbian A2AD strategy. The fleet continues to seek engagement with the US SAG.
2. North Torbian Western Fleet continues supporting the Amphibious Task Group (ATG).
3. Olvanan Carrier Strike Group (CSG) remains on station in South China Sea and provides early warning and surveillance spt to North Torbian Eastern Fleet SAG. May also continue to attempt to block coalition naval forces entering the South China Sea.
4. North Torbia continues to employ components of its A2AD system to keep US and coalition forces at a distance to stop them being able to provide military support to South Torbia.
5. Olvana continues to spt North Torbia providing access to its ISR and nav satellites.
6. The North Torbian government continues its INFOWAR campaign to legitimise its invasion of South Torbia to unite the two countries.



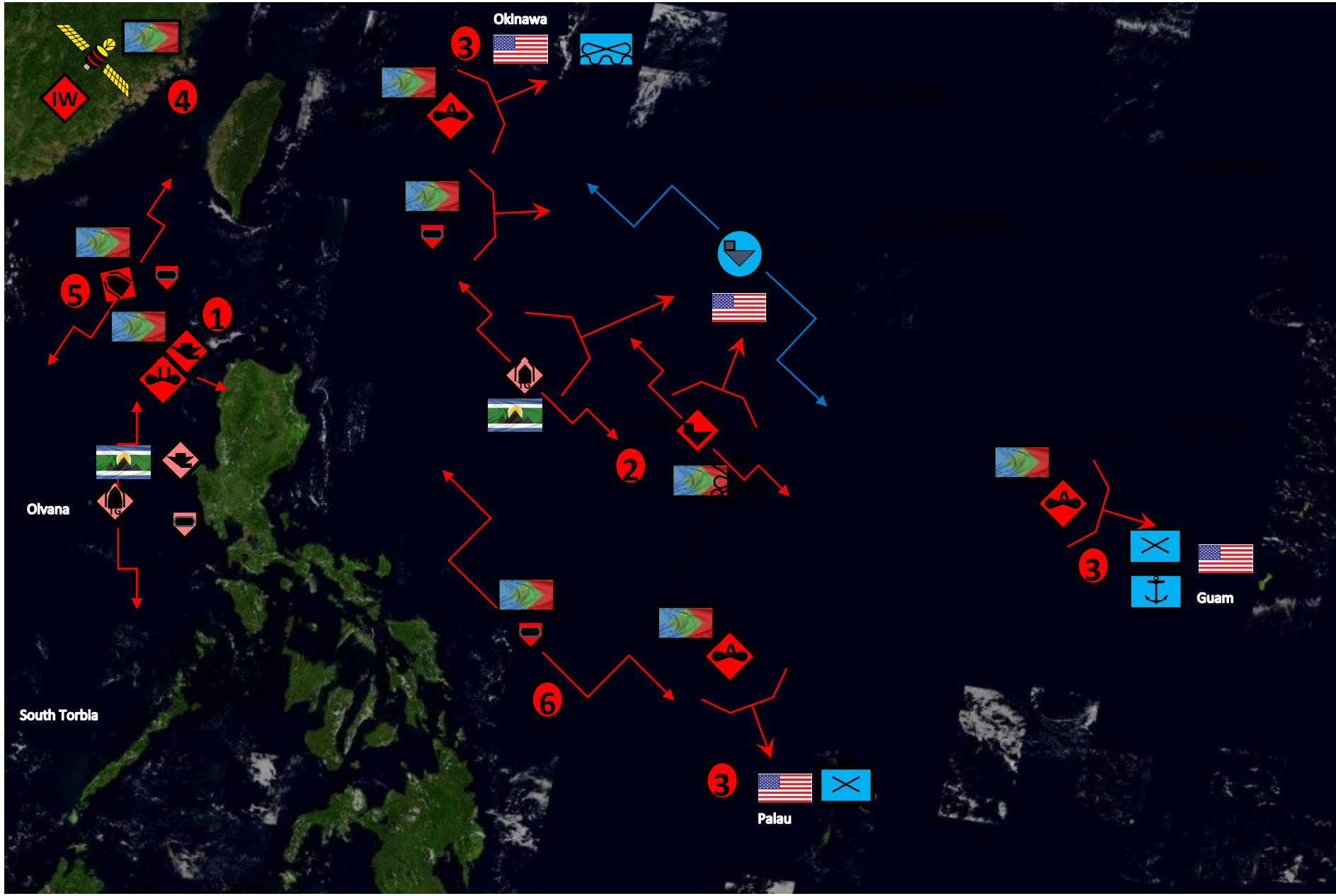
MLCOA

1. 4 MECH INF DIV (IFV) will occupy and secure Dagupan.
2. After receiving reinforcements and resupply 5 MECH INF DIV (IFV) and 6 MECH INF DIV (APC) will continue their advance south wards to secure Manila.
3. 5 MECH INF DIV (IFV) will most likely use National Route E1 as is its axis of advance and 6 MECH INF DIV (APC) will most likely use Route 56 as its axis of advance.
4. 5 MECH INF DIV (IFV) most likely to be the main effort and 6 MECH INF DIV (APC) is most likely the supporting effort.
5. The advance is most likely to employ a Snow Dome IADS as follows:
   a. MANPAD detachments travelling with recon elm and the advance guard will infiltrate forward to ambush potential rotary wing attack.
   b. SHORAD systems will manoeuvre with main boy to provide close-in AD.
   c. SHORAD systems will also conduct bounding overwatch to provide higher altitude defence.
   d. EW assets will conduct EA against adversary emitters
   e. Organic artywill provide DS to the advance guard and following manoeuvre elm.
   f. Div arty including tube and MRL will provide deep fires and counterfire.
   g. UAVs (both offensive and passive) will be deployed forward for surveillance and the engagement of targets of opportunity.
6. The MEF will most likely continue to build forces in its beach head IOT to continue its advance on Subic Bay.



MDCOA

1. Olvana agrees to direct involvement in the conflict and deploys ground forces plus additional AD, ENGR and ABSM, EW and comms equip.
2. The Olvanan CSG deploys to the Philippine Sea to join with the TPN Eastern Fleet to directly engage with the US CSG. OPN submarines may join the CSG.
2. North Torbian Western Fleet could be reinforced with an OPN SAG to provide additional spt to the Amphibious Task Group (ATG).
3. OPAF units are likely to be deployed to North Torbia to bolster the TPAF bomber regt to engage targets in Okinawa, Guam and Palau.
4. Increased and enhanced space, EW and IW spt provided to bolster the North Torbian A2AD strategy and to prosecute the INFOWAR battle to reinforce North Torbia's legitimate right to unite the two countries by force.
5. Further OPN assets are to deployed to the South China Sea and Luzon Strait IOT to isolate the Torbian archipelago.
6. OPN submarines are deployed south in the Philippine Sea IOT to isolate the Torbian archipelago.



COG: Ability to effectively employ A2AD to deter coalition intervention in MNF-OBA AO

CC	C3ISR	Firepower	Logistics	Mobility/protection
CR	• Artillery and AD Command Elements • PTAF Command Elements • PTNF Command Elements • Artillery intelligence system • Air Force intelligence system • UAV system • Artillery and AD HQ & Control locations • Artillery and AD Communications systems • Intelligence communications systems to • Artillery and AD / Air Force systems • Artillery and AD radars	• Artillery and AD Weapons Systems • Coastal Defence Missile Batteries • Artillery Ammunition incl ASMs • AD Missiles • Aircraft systems (Hong-6, Tu-22M3 and J-17) • RW Aircraft systems • Artillery systems operators in the AO • Pilots of aircraft both FW and RW • Aircraft maintenance operators	• MSR to Artillery ammunition dumps • Logistics transport assets • Fuel depots • Logistics convoys • Missile stocks and inventories • Artillery ammunition • RW FARP locations in the AO • Aerial refuelling of FW air assets	• Camouflage of Artillery & Coastal Defence systems • Air defence systems around Coastal defence batteries & Artillery systems • Manoeuvre of Artillery systems (155 SP) • Manoeuvre of CDU • Physical security of Artillery firing positions • Airfield security • Deception TTPs
CV	• Artillery and AD HQ locations open to destruction • Artillery and AD radars • Artillery ISR system open to deception & denial of observation • Artillery communications systems susceptible to disruption (physical & electronic) • UAV control systems open to disruption	• RW assets (including FARPs) open to destruction • ASCM open to disruption (electronic) • Pilots & artillery operators susceptible to deception & influence	• MSR choke points open to disruption or denial for artillery resupply in AO • Fuel depots susceptible to destruction in AO • Artillery & RW transports open to physical destruction in AO	• CDU open to destruction in coastal areas • Airfields open to disruption in AO • SP artillery open to disruption on the move (inability to fire)

ASSESSED ENEMY CRITICAL FACTORS/DECISIVE POINTS

Critical Factors

- The North Torbian C2 arrangements are in the early stages of development and may have difficulty in coordinating all of the A2AD assets across the three services as well as support from Olvana.
  - Decision-making processes are likely to be immature.
- Much of the A2AD equipment has not been in service with the TPA, TPN and TPAF for very long.
  - Reaction and response times are likely to be longer.
  - There may be a greater reliance on experienced contractors and foreign advisors to crew equipment.
- North Torbia does no have the logistical capacity to conduct sustained operations for more than 72 hours and over a long period of time.
  - TPA ground forces may be forced to scavenge and use capture supplies.
  - Although supply lines are short, they are limited and vulnerable to interdiction and disruption.
  - There is likely to be a heavy reliance on supplies flown/shipped in from Olvana.

Decisive Points

- Artillery and AD HQ & Control locations
- Artillery and AD Weapons Systems
- Coastal Defence Missile Batteries
- Aircraft systems (Hong-6, Tu-22M3 and J-17)

THEATRE NAI

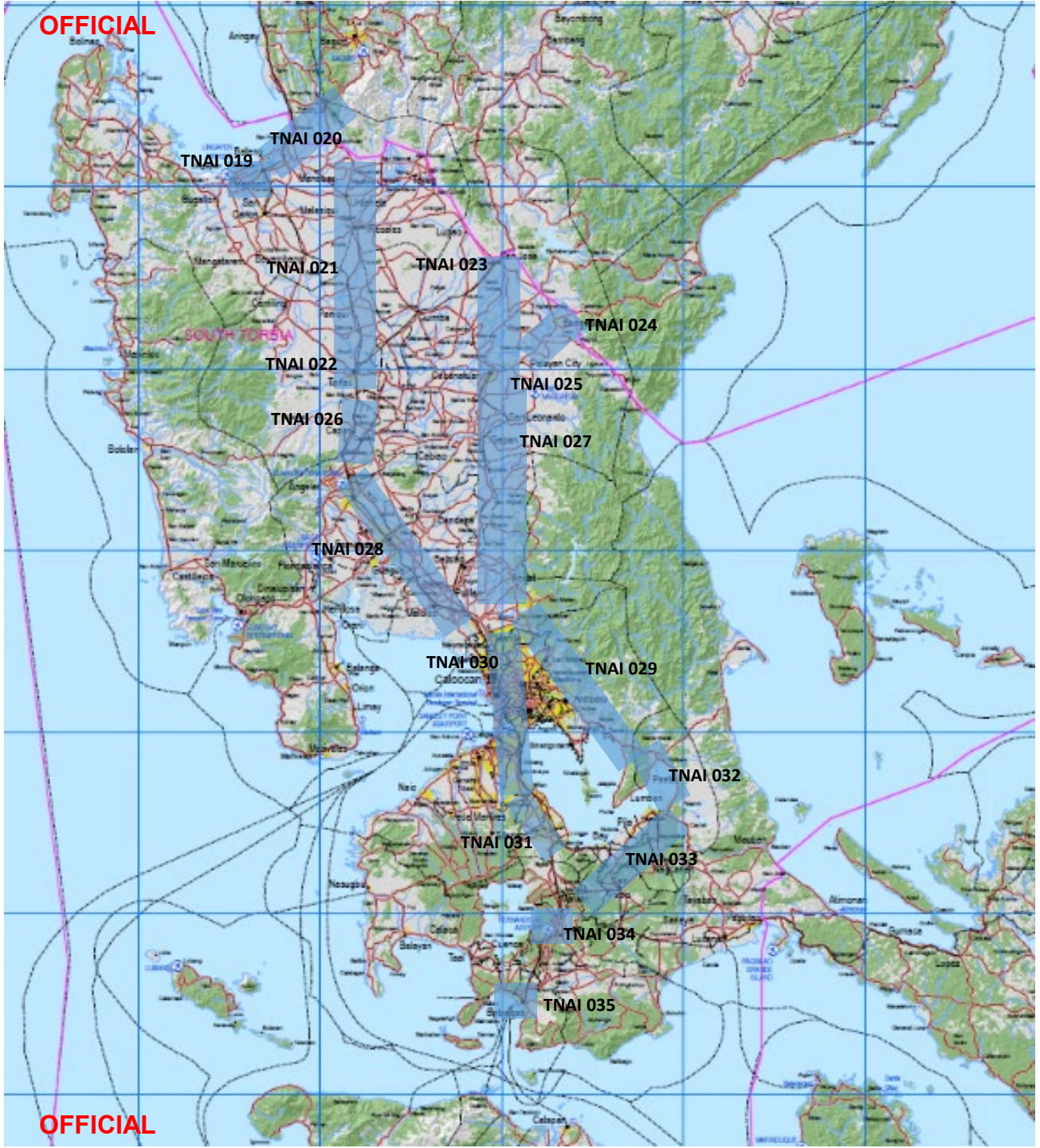
TNAI	Description	Grid (MGRS) Centrepoint
001	Luzon Straight	51Q UD037 105
002	Philippine Sea	52P GA281 374
003	Visayan and Subayan Seas	51P VQ550 368
004	Verde Island Passage	51P TR721 082
005	South China Sea	50Q MD677 426

NAI – NORTH TORBIA

TNAI	Description	From Grid (MGRS)	To Grid (MGRS)
006	Laoag Naval Base	51Q TA 47128 24175	-
007	Aparri Naval Base	51Q UA 56375 30348	-
008	Tuguegarao Airbase	51Q UV 71968 28115	-
009	Vigan Naval Base	51Q TV 22861 51504	-
010	Cauayan Airbase	51Q UU 59822 57685	-
011	San Fernando Naval Base	51Q TU 14256 34819	-
012	Baguio Airbase	51Q TT 49022 97894	-
013	Likely MSR	51Q UU 17819 41743	51Q TT 80674 91017
014	MDL	51Q TT 22863 96841	51P UT 30830 03044
015	Coastal Road – Eastern North Torbia	51Q VU 43616 87528	51Q VU 07291 01057
016	Casiguran Naval Base	51Q UT 96680 91381	-
017	Coastal Road – Eastern North Torbia	51Q VU 07291 01057	51P UT 45250 42754
018	San Luis Airbase	51P UT 43197 43680	-

NAI – SOUTH TORBIA

DNAI	Description	From Grid (MGRS)	To Grid (MGRS)
019	Dagupan	51Q TT 16706 75022	
020	Potential NT Axis of Advance/MSR	51Q TT 34026 96703	51Q TT 16706 75022
021	Potential NT Axis of Advance/MSR	51Q TT 34822 89699	51P TT 42767 13357
022	Tarlac	51P TT 42767 13357	
023	Potential NT Axis of Advance/MSR	51Q TT 78253 84049	51P TS 72452 42745
024	Potential NT Axis of Advance/MSR	51P UT 00980 29118	51P TT 81092 13189
025	Cabanatuan	51P TT 81092 13189	
026	Potential NT Axis of Advance/MSR	51P TT 42767 13357	51P TS 40268 87692
027	Potential NT Axis of Advance/MSR	51P TT 81092 13189	51P TS 73334 42205
028	Potential NT Axis of Advance/MSR	51P TS 40268 87692	51P TS 84571 25687
029	MSR	51P TS 89777 28985	51P UR 24170 99082
030	MSR	51P TS 84276 25842	51P TR 93802 79712
031	MSR	51P TR 93802 79712	51P UR 00264 53523
032	MSR	51P UR 24170 99082	51P UR 36219 85173
033	MSR	51P UR 36219 85173	51P UR 17936 56125
034	Barrio Militar Aiport (APOD)	51P TR 97367 43554	
035	Batangas Port (SPOD)	51P TR 88580 21742	



PIR

1. Where are the TPN's submarines?
2. Where are the TPAF's strategic bombers based?
3. Where are the TPAF's early warning and airborne EW assets based?
4. How are the North Torbians accessing Olvana's surveillance and navigation satellites?
5. What are the locations of the TPA Southern Army's coastal artillery battalions?
6. What are the locations of 4, 5 and 6 MECH DIVs' HQ and manoeuvre elements?
7. Where are the TPA Southern Army's IADS?
8. Where are the TPA Southern Army's EW systems?
9. Where are TPA Southern Army's UAVs and how are they being used?
10. What NT SPF are known to be operating in the AO?