AirSea Battle

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JAN VAN TOL
MARK GUNZINGER
ANDREW KREPINEVICH
JIM THOMAS

PRESENTATION OVERVIEW

WHY AIRSEA BATTLE?

THINKING ABOUT AN ASB CONCEPT

OPERATIONAL CHALLENGES

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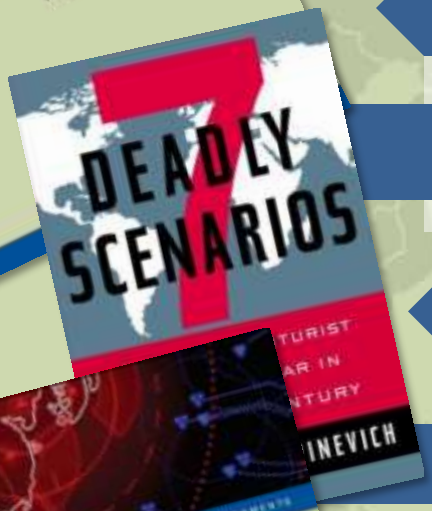
SUMMARY AND CONCLUSIONS

WHY AIRSEA BATTLE?

BACKGROUND

CSBA's Research and Analysis

- The Challenges to US National Security
- Defense Planning for the Long Haul
- Charting a Course for Tomorrow's Fleet
- An Air Force Strategy for the Long Haul
- 7 Deadly Scenarios
- The Pentagon's Wasting Assets
- Why AirSea Battle?



WHY AIRSEA BATTLE?

Proliferation of anti-access/area-denial capabilities threatens traditional US methods of providing forward presence and projecting power

East Asia and the Western Pacific an area of enduring vital US interest

The US has longstanding security commitments throughout the region

The Most Stressful Case

PLA developing an advanced anti-access/area-denial (A2/AD) network and associated capabilities threaten regional stability and security

Bottom Line

Current trends suggest that unless offsetting actions are taken by the United States and its allies, over the next decade the military balance in the WPTO will become both unfavorable and unstable

THE PEOPLE'S LIBERATION ARMY

"We should not mechanically follow the U.S. theory"

"[W]e should not try to meet a new challenge by running after others"

"We should try to create our own superiority"

"Combine western technology with eastern wisdom. This is our trump card for winning a 21st century war"

"The other side may be strong, but they are not strong in all things… and our side may be weak, but we are not weak in all things"

Be extremely subtle, even to the point of formlessness.
Be extremely mysterious, even to the point of soundlessness.
Thereby you can be the director of the opponent's fate.

To win one 100 victories in 100 battles is not the acme of skill.
To subdue the enemy without fighting is the acme of skill.

SHASHOUJIAN: "THE ASSASSIN'S MACE"

The PLA's efforts to shift the military balance began to accelerate after the 1995-96 Taiwan Crisis

Shashoujian—ancient Chinese hand maces that could be concealed and employed with little or no warning

In the late 1990s, numerous articles espouse *shashoujian* as the best way to confront the US military

PRC strategists refer to *shashoujian* capabilities and "combat methods" as those powerful enough to deter a superior adversary—the "inferior defeats the superior"

The Chinese apparently seek to combine both the Chinese tradition of strategic thought and *shashoujian* —the Wisdom of the East with the Technology of the West

"We can fight a war with them [the United States], they will not be able to continue the war after a while. Moreover, we also have our shashoujian." —General Haung Bin

THE ASSASSIN'S MACE

The Chinese are building up their military capabilities with the apparent goal of extending their power and influence ever further from their shores, destabilizing the military balance that has enabled unparalleled peace and prosperity in the region over the past two decades

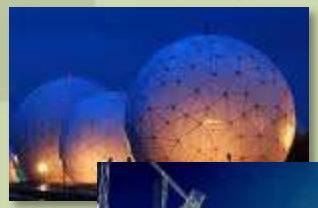
Among the capabilities associated with Assassin's Mace are:

Anti-satellite weapons

Spaced-based RSTA

Electromagnetic Weapons

Cyber warfare



Electronic warfare

Over-the-horizon radars

Ballistic and cruise missiles

Integrated air defense systems

Advanced fighter aircraft

UAVs

Submarines

Sea mines

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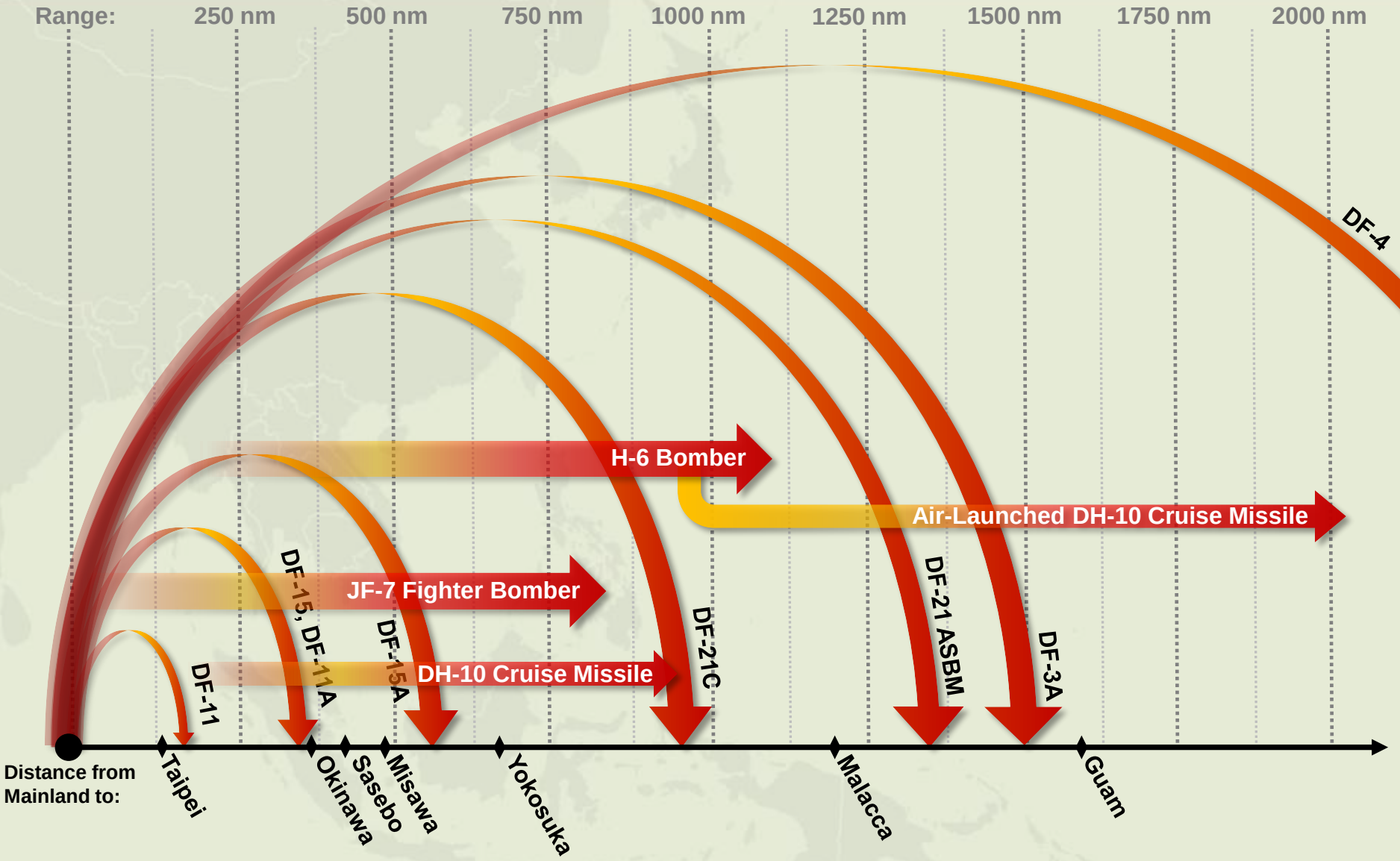
THE GROWING RANGE OF PLA SYSTEMS



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PROJECTING POWER TO THE SECOND ISLAND CHAIN

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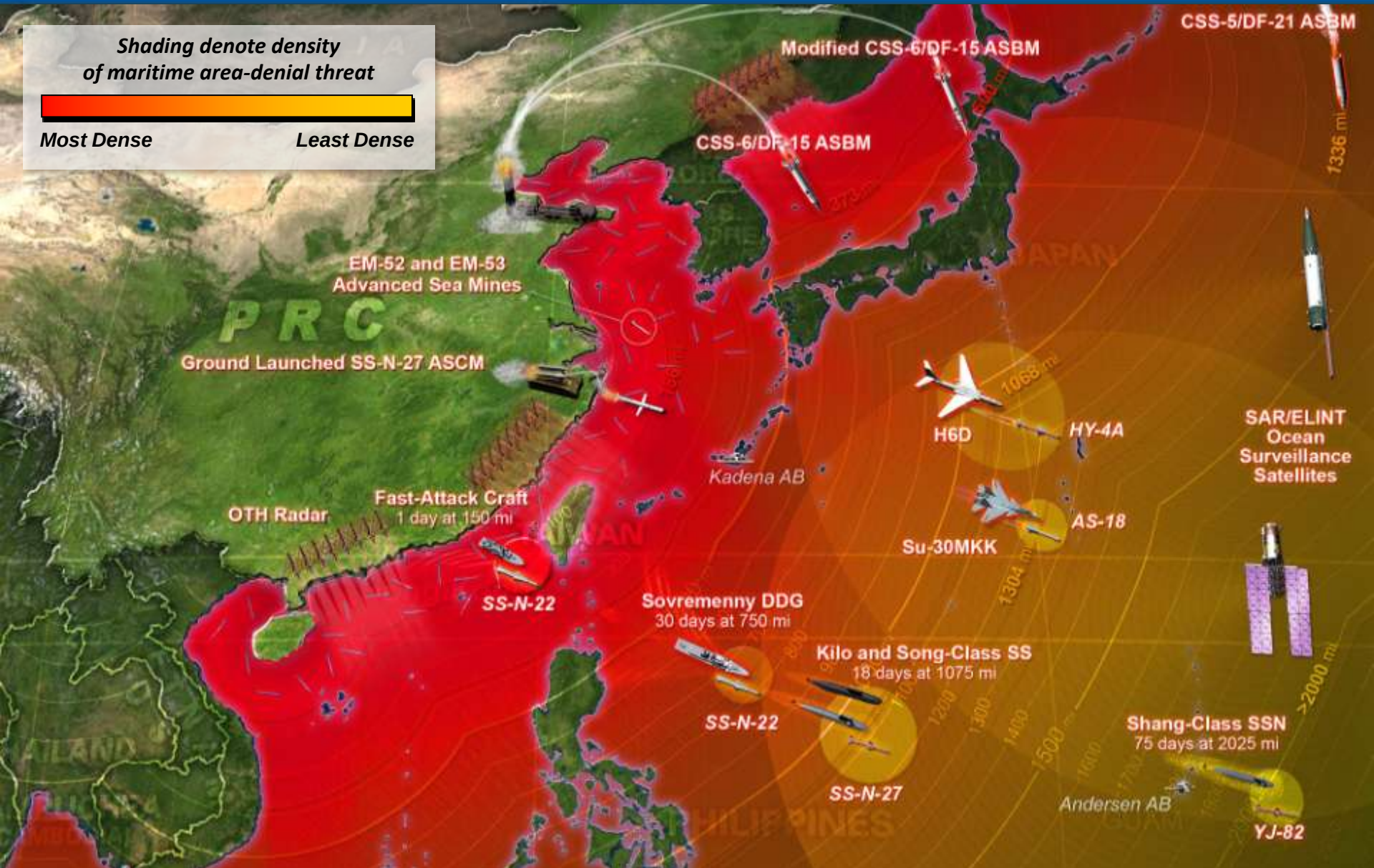


ERODING CRISIS STABILTIY

Substantial U.S. forces are forward-based and increasingly vulnerable to preemption

Consequently, U.S. ability to reassure allies and partners, deter adversaries, and defeat enemies is almost certainly in decline

This situation creates a strategic choice for the United States, its allies and partners:

acquiesce in a dramatic shift in the military balance or take steps to preserve it

Action needs to be taken now to alter the situation—with an "offset" strategy

THINKING ABOUT AN AIRSEA BATTLE CONCEPT

INTENT

ASB is NOT about war with China or containment of China

ASB IS part of a larger "offsetting strategy" aimed at preserving a stable military balance and maintaining crisis stability in East Asia

ASB must demonstrate the ability of the U.S. to intervene effectively in the event of military conflict

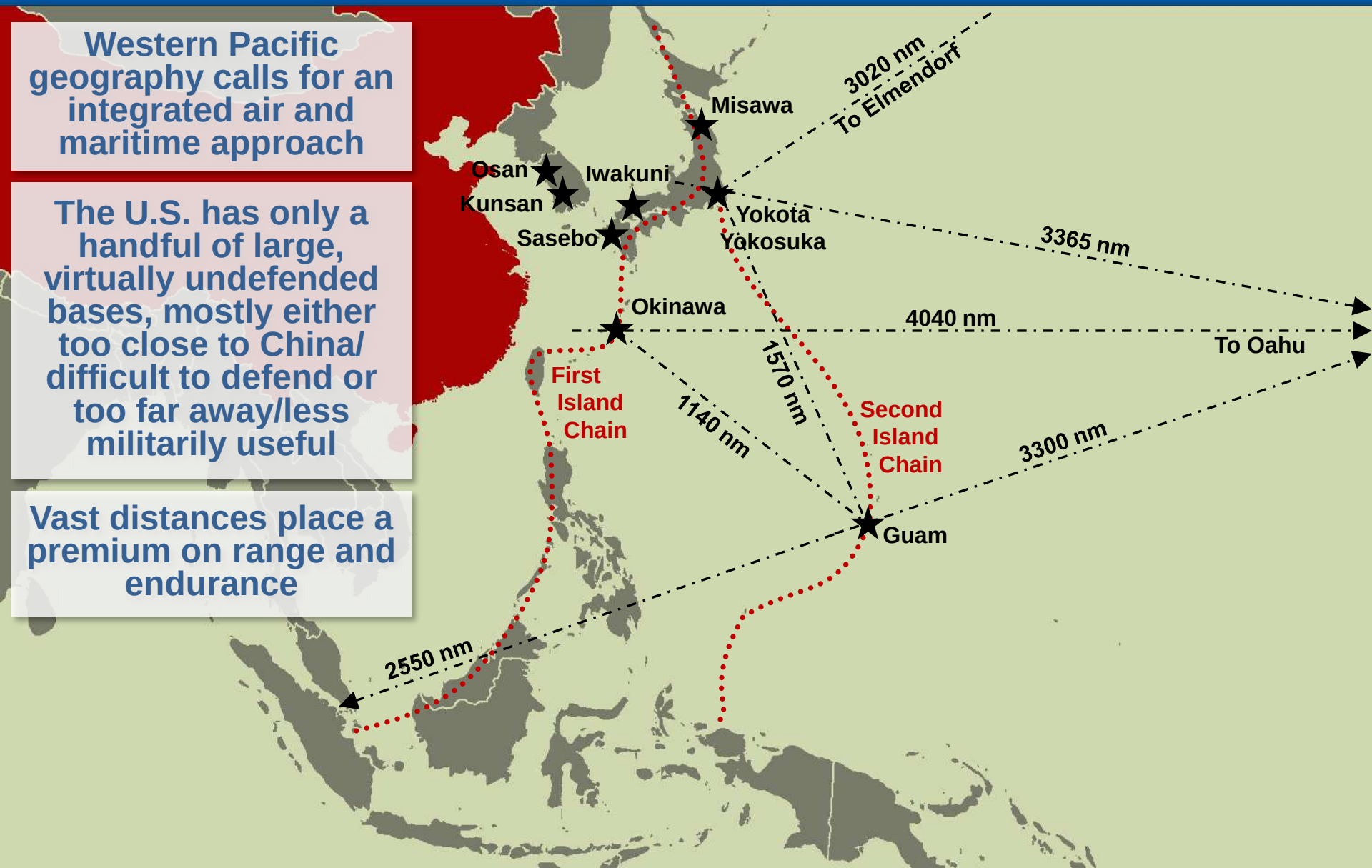
ASB should increase the confidence of regional actors that China, should it choose war, would fail to realize its objectives through military aggression or coercion

GEOPHYSICAL FACTORS

Western Pacific geography calls for an integrated air and maritime approach

The U.S. has only a handful of large, virtually undefended bases, mostly either too close to China/ difficult to defend or too far away/less militarily useful

Vast distances place a premium on range and endurance



GEOSTRATEGIC FACTORS

The U.S. must be able to reassure its allies and partners in the region

- Most are island nations (or quasi-islands in the case of South Korea), and lack strategic depth
- All must be supported and defended from the sea

U.S. inability—real or perceived—to defend its allies and partners could lead to regional instability, to include coercion or aggression

US success will depend heavily on Japan's active participation as an ally

OPERATIONAL CHALLENGES

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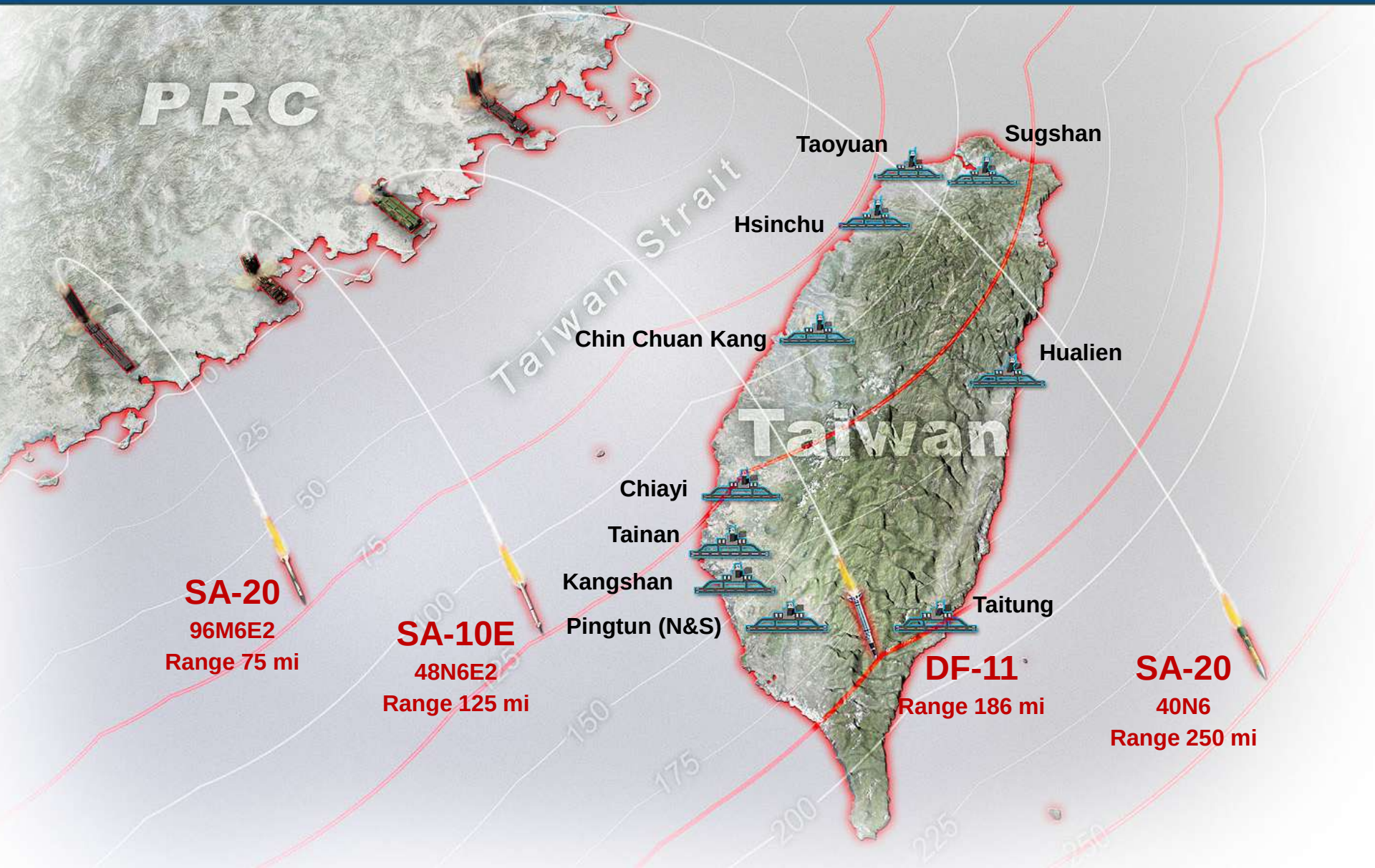
PLA MISSILE FORCES AND TAIWAN



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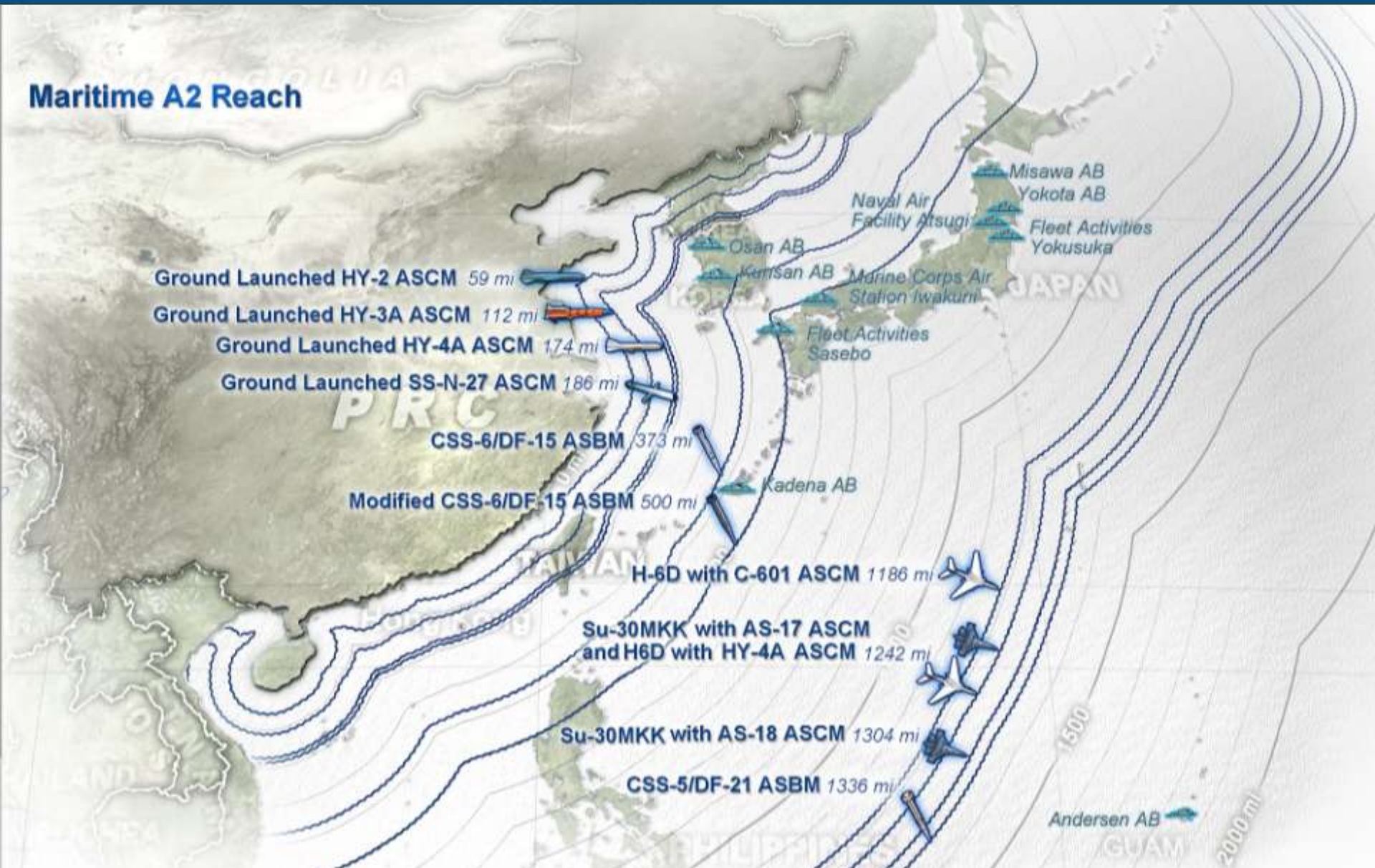
PUSHING U.S. AIR AND NAVAL FORCES BEYOND EFFECTIVE OPERATIONAL RANGE



A POSSIBLE PREEMPTIVE A2/AD ATTACK

The PLA would first seek to ***disrupt U.S. battle networks*** by destroying or jamming the US satellite constellation in concert with coordinated cyber and electronic warfare attacks

The PLA would use salvoes of ***precision-guided missiles to strike at key U.S. and allied targets***, such as forward air bases, carrier strike groups and key logistics capabilities

With U.S. aircraft either destroyed, unable to sortie, or flying from long ranges without adequate tanker support, and U.S. surface vessels held back beyond their offensive weapons ranges by the threat of anti-ship missiles or submarines, the PLA would quickly ***gain air superiority and naval freedom of maneuver*** to achieve its military and political goals

THE U.S. "WAY OF WAR" AND PLA COUNTERS

- **Creating rear-area sanctuaries for U.S. forces and logistics depots**
  - *Air, surface and undersea attacks against deploying forces*
- **Rapid deployment of air, ground and naval forces to forward bases and littorals**
  - *Air, cruise and ballistic missile attacks against U.S. bases*
- **Initiating operations at a time/place of U.S. choosing**
  - *PRC initiation of hostilities*
- **Generating and sustaining large number of air sorties**
  - *Air, cruise and ballistic missile attacks against U.S. airbases and aircraft carriers*
- **Operating complex battle networks and buying up satellite bandwidth**
  - *Anti-satellite, cyber and electronic warfare attacks*

CRITICAL COMPETITIONS

Battle Network
vs. Counter-Battle Network

Missile Attack
vs. Missile Defense

Air Superiority
vs. Air Defense

Sea and Undersea Control
vs. Sea and Undersea Denial

Force Sustainment
vs. Counter-Force Sustainment

BATTLE NETWORK VS. COUNTER-BATTLE NETWORK

Two broad aspects:

- Destroying/degrading/exploiting hostile networks
- Keeping friendly networks in operation

Space access versus space denial

Maintaining C2 and ISR connectivity

Cyber attack versus cyber defense

MISSILE ATTACK VS. MISSILE DEFENSE

Core elements of U.S. and projected PLA long-range precision strike differ strikingly:

- U.S. conventional strike is based heavily on manned bombers and strike-fighters, plus distributed LACMs
- PLA long range precision strike systems are primarily land-based ballistic missiles (including ASBMs) and ASCMs and LACMs launched from aircraft, ships, subs

Creates asymmetric defensive problems
—and offensive opportunities

The power of combinations between active and passive defenses as well as offensive counters is key

SEA/UNDERSEA CONTROL VS. SEA/UNDERSEA DENIAL

- Likely mutual denial for surface forces over large areas
- U.S. submarines in high demand for multiple missions
  - ISR, strike, strike support, ASW, offensive mining
- PLA submarines have mainly ASUW role
  - Primarily as ASCM shooters, a key A2/AD component
- Critical importance of ASW campaign
  - PLA Navy poor at ASW, but new undersea technologies may pose increased risk to U.S. subs

FORCE SUSTAINMENT VS. COUNTER-FORCE SUSTAINMENT

Force structure and capacity constraints

- Current and programmed U.S. forces may suffer from significant shortages of munitions

Payload and global munitions inventory constraints

- Platform magazine limitations
- Very limited PGM production surge capacity

Operational logistics and sustainment weaknesses

- Particularly difficult challenge due vulnerability of limited basing
- Combat Logistics Force configured for peacetime operations

POTENTIAL ELEMENTS FOR A CONCEPT OF OPERATIONS

KEY ASSUMPTIONS

- U.S. will not initiate armed hostilities
- Tactical warning will be limited (e.g., days)
- Chinese and U.S. territories will not be sanctuaries
- Space will be contested
- Mutual nuclear deterrence will hold
- Australia and Japan will remain active U.S. allies
- China will attempt to achieve a quick victory by:
  - Inflicting such damage to U.S. military capabilities that the U.S. would choose to discontinue the fight
  - Making the prospect of an eventual U.S. victory appear too prolonged or costly
  - Driving a major U.S. ally out of the war

A key ASB objective is to deny adversaries a quick victory

SUBSTANCE OF AN ASB CONCEPT

CSBA's concept envisages a 2-stage campaign:

1 **Commence four initial lines of operation in parallel**

- Withstand initial attacks and limit damage to U.S. & allied forces
- Execute a blinding campaign against enemy battle networks & ISR systems
- Execute a missile suppression campaign against long-range strike systems
- Seize the initiative in the air, sea, space, and cyber domains

2 **If necessary, pursue follow-on operations and initiatives as part of a larger strategy for winning a prolonged conflict**

- Sustain and exploit the initiative in all warfighting domains
- Conduct "distant blockade" operations
- Sustain operational logistics
- Ramp-up industrial production

WITHSTANDING INITIAL ATTACKS

U.S./allied forces implement defensive measures and posture available forces to execute high-priority offensive operations

- Land-based air forces disperse to an expanded basing posture
- Air and missile defenses flow to reinforce Japan's defensive posture
- Naval surface forces move to preplanned stations, e.g., AEGIS ships to BMD stations, high value units move/stay beyond enemy threat ranges and may employ operational deception
- Submarines move to conduct anti-submarine warfare inside the 1st island chain and along Ryukyus & Luzon Strait
- SSGNs and some SSNs position to provide ISR and SEAD support for strike missions
- Move additional air and naval units, precision munitions into theater; begin convoy escorts and other sea lines of communication protection measures

EXECUTING A BLINDING CAMPAIGN (1)

ISR systems may be the "Achilles' heel" of A2/AD battle networks

Run-up to conflict may involve a long "competition" in cyber, space, and undersea domains to map red and blue networks

At onset of hostilities, U.S. could rapidly execute a blinding campaign to:

- **Degrade/deny enemy's ability to target mobile assets**

  Immediately begin to regain U.S. naval maneuver and ability to close, thereby increasing air sortie generation

- **Deny enemy's ability to assess effects of strikes against U.S. bases**

  Will help drive up demands on PLA missile inventories

  Allows land-based air forces to play "shell game" from diversified bases

EXECUTING A BLINDING CAMPAIGN (2)

Blinding actions against enemy forces could include:

- Denying effective use of ISR systems used to target naval forces (e.g., ELINT systems, ocean surveillance, and OTH radar)
- Denying enemy's space situational awareness and ability to target U.S. space systems
- Disrupting airborne ISR sensors and severing communications links
- Deploying area EW platforms to deny or spoof enemy ISR and air defense systems
- Denying effective use of undersea ISR

Defensive measures could include:

- Deploying back-up airborne C2 and ISR systems to mitigate the loss of friendly space systems
- Defending support aircraft, airborne sensor and communications relays against enemy fighters armed with long range air-to-air missiles

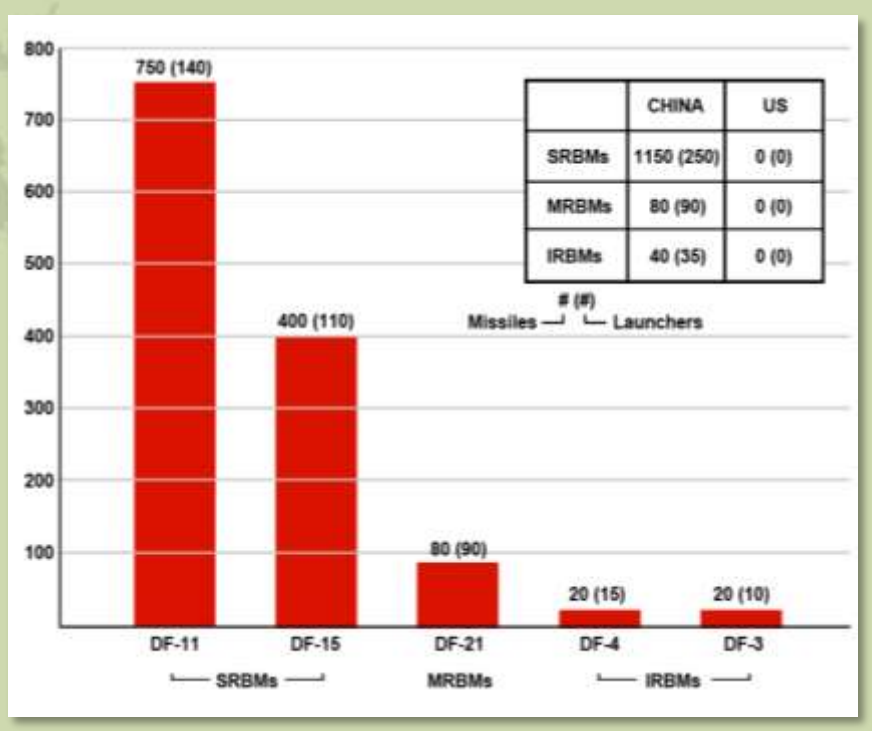
EXECUTING A MISSILE SUPPRESSION CAMPAIGN

Countering/thinning enemy's missile force critical to preventing a quick "knock out" blow

Persistent land- and sea-based manned & unmanned stealthy penetrators locate and attack mobile missile launchers

U.S. strikes could destroy some mobile launchers but may have a greater effect by suppressing enemy missile ops

- **Induce launchers to move and hide, limit ability to launch coordinated salvoes, attrite missile magazine , degrade resupply**



USAF and USN should integrate offensive and defensive support ops

- **Standoff & penetrating long range strikes suppress enemy air and ground coastal IADS**
- **Airborne electronic attack platforms degrade IADS nodes and SAM sites to create multi-axis corridors for penetrators**
- **Towed/expendable decoys suppress air defenses, create multiple false targets to induce ineffective SAM shots and air intercepts**

SEIZING THE INITIATIVE

Additional U.S./allied actions to regain the initiative could include:

- **Enhancing air and missile defenses of Japan; extending air superiority further out over the East China Sea and down the Ryukyus**
- **Sustaining strikes against ballistic missile targets (including production and storage); attacking regenerated counter-space and long range sensors**
- **Continuing the blinding campaign by attacking airborne ISR and communications relays**
- **Conducting anti-surface warfare ops to deny PLA warship access to East China Sea and South China Sea**
- **Continue ASW campaign inside 1st island chain (subs complemented by offensive mining by USAF bombers) while maintaining ASW barrier ops**

Extending air superiority makes key contribution

- **Increases areas that are safe for air refueling support and ASW aircraft**

ASW success reduces enemy ASCM-armed sub threat, progressively frees up U.S. subs for other missions

FOLLOW-ON OPERATIONS

- Sustain and exploit the initiative in all warfighting domains
- Conduct "distant blockade" operations
- Sustain operational logistics
- Ramp-up industrial production (especially precision guided munitions)

AIR FORCE—NAVY SYNERGIES ACROSS LINES OF OPERATIONS

USAF helps restore naval freedom of maneuver by conducting persistent strikes on mobile missile launchers and denying enemy effective use of maritime ISR

USN sub and surface combatants, including carrier-based long range strike, attack enemy surveillance and air defenses to help enable USAF penetrating strikes

USAF long endurance/high payload bombers with maritime strike weapons and mines support USN strike, intercept, blockade ops

USN ballistic missile defenses help defend USAF forward operating bases

USAF air refueling tankers support USN air operations

USN carrier manned and unmanned aircraft enable forward USAF air refueling operations by suppressing enemy air threats

SELECTED INITIATIVES

Withstanding Initial Attack	Network Blinding Campaign	Missile Suppression Campaign	Continuing to Seize the Initiative
Land- and sea-based kinetic and non-kinetic missile defenses	Precision nodal attack (penetrating strike, conventional prompt global strike, next cruise missile, other standoff strike)	Long range strike family of systems (next bomber, cruise missile, manned/unmanned, UCAS, extended-range stealthy ISR/strike, stealthy penetrating ISR)	Increasing carrier standoff and reach (multi-mission UCAS, ballistic and cruise missiles)
Diversifying basing (Tinian, Palau, Saipan…)	Offensive and defensive cyber (increased capacity, planning, realistic exercises)	Precisions guided munitions for fixed, mobile, relocatable, and hardened/deeply buried targets; increasing precision munitions inventories	ASW (SSNs, airborne ASW/maritime surveillance, USAF ASW munition)
Selected base hardening (Guam, Japan)	Space control capabilities	Undersea capabilities (SSGNs/SSNs and missile pods supporting ISR missions)	Migration to undersea (SSNs, UUVs, extending the undersea magazine, ISR support)
Rapid base repair and regeneration	Space hedge (rapid launch, microsats, dormant sats)	Undersea capabilities (SSGNs/SSNs and missile pods supporting ISR missions)	Kinetic and non-kinetic air & missile defenses
Increased range = increased basing options and reduced vulnerability	Airborne hedge (high altitude, long endurance relays)	Develop technologies for boost and ascent phase missile attack (e.g., air-launched hit-to-kill munitions)	Air refueling capacity

WRAP-UP

The ongoing diffusion of A2/AD capabilities is progressively challenging the U.S. ability to preserve access to areas of vital interest

At present, the PLA has by far the most robust A2/AD capabilities, and is moving rapidly to enhance them—hence, the PLA poses the most demanding test for an AirSea Battle operational concept

AirSea Battle is designed to maintain a stable military balance in those areas that are both vital to U.S. interests and where A2/AD capabilities are being fielded—its purpose is to discourage acts of coercion or aggression and promote change through internationally accepted norms

To succeed AirSea Battle requires the close coordination of both the Air Force and the Navy, as well as the active support of key allies

The changes in the U.S. defense program, force structure, force posture needed to execute AirSea Battle are sufficiently different from the current program of record as to require prompt action in order that adjustments can be made in a timely manner and within projected resource levels

This effort represents the beginning of our assessment of this issue—"AirSea Battle 1.0"

QUESTIONS?


CENTER FOR STRATEGIC AND BUDGETARY ASSESSMENTS
CSBA
AirSea Battle
A Point of Departure Concept