

# Air-Sea Battle and the Pacific

“Europe is a Landscape,  
the Pacific a Seascape

-Robert Kaplan

# The "Hood"



# Challenges in the AOR

- Opposing a great power is a means of asserting one's own power, and several countries aspire to be great powers regionally if not globally.
- One expression of power is the ability to deny access or disrupt operations, and many countries seek to strengthen their anti-access/area-denial (A2/AD) capabilities as a means of asserting regional control and influence.

# Tensions in the Pacific

- In its 2010 white paper on national defense, the PRC says that it “will never seek hegemony,” that it “opposes hegemony and power politics in any form,” and that it “pursues a national defense policy which is defensive in nature.”

## Tensions in the Pacific cont...

- More importantly, to assert these claims, the PRC has built a robust, power-projecting A2/AD capability that could be brought to bear against the United States, its allies, and its partners.

# People's Liberation Army Air Force pilots climb out of J-10 fighter jets



# PRC's SOUTHCHINA SEA STRATEGIES

This is drawn from Alexander L. Vuving  
research article:

ASIA PACIFIC DEFENSE FORUM MAGAZINE VOLUME  
41, NUMBER 1: AIR POWER

# Terra-Forming

The Spratly Islands have a unique construction site. Submerged reefs are now artificial islands. They have created more than 3.9 SqMls of new land on seven sites across an archipelago whose total land area had been 1.5 SqMls.

Fiery Cross Reef (which was submerged at high tide when first occupied in 1988) now has a land mass of 1.1 SqMls, a 10,000 foot runway and a 155 acre harbor. It is now many times larger than Itu Aba, the largest natural island in the Spratlys.

China had created 1.5 SqMls and 5.6 SqMls at Subi Reef and Mischief Reef, respectively, and these numbers are still growing



# Mischief Reef in the Spratly Islands in the South China Sea



# What is the endgame of this island building?

- The roles of China's man-made islands in wartime and in maritime law seem extremely doubtful. Too small and isolated to sustain major attacks, these assets can easily become liabilities in times of war. Being completely artificial, they are not entitled to a 200-nautical-mile exclusive economic zone. Why is China investing a huge amount of resources to create these islands? What will China do with them

# PRC Strategy; Right out of the Book

- PRC is pursuing a strategy derived from Sun Tzu's *Art of War*: "Preparing for Winning Without Fighting."
- The overall objective is to gain control of the South China Sea, but not through large battles.

# PRC Strategy; Right out of the Book cont...

- Rather, China wants to achieve its objective through activities that create new facts on the ground (and the water), set up the playing field and psychologically change the strategic calculus of other nations.
- The underlying logic of this strategy is to shift the propensity of things in favor of Chinese dominance by maneuvering the strategic configurations of the region.

# PRC's 6 decade-long involvement in the South China Sea 3 Imperatives

- First imperative is to avoid large battles as much as possible; clashes can be initiated, but only to exploit an existing favorable situation
- The second imperative is to control the most strategic positions in the area;
- The third imperative is to develop these positions into strong points of control, robust hubs of logistics and effective bases of power projection

# Building the Region in Their own Image



# A Coercive Blend

- China's approach mixes coercive elements with cooperative ones, using the latter to lure and trap others in the former
- For countries with no territorial or maritime disputes with Beijing in the South China Sea, China will incentives acquiescence

*Bottom Line: Anti-Access /Area Denial (A2/AD)*

# A Chinese People's Liberation Army Air Force J-31 stealth fighter





# The US Response

- In June 2012, strategic guidance specifically tasked the US military to project power despite A2/AD.
- To deal with the A2/AD problem, the US Department of Defense (DOD) has turned to Air-Sea Battle (ASB), putting concepts into practice.

# How is this being done?

- United States Pacific Air Forces (PACAF) is working through United States Pacific Command (PACOM) to evolve ASB concepts into doctrine and operational action as a counter to A2/AD practices and as a means of prevailing in the face of informationized warfare.

# The History of Air-Sea Battle

- In 2010 the Center for Strategic and Budgetary Assessments (CSBA) published *AirSea Battle: A Point-of-Departure Operational Concept*, which presents ASB as a strategic alternative to passively accepting A2/AD capabilities pursued by the PRC.

# The History of Air-Sea Battle cont...

- In May 2013, the office published *Air-Sea Battle: Service Collaboration to Address Anti-Access and Area Denial Challenges*

# What is ASB?

- ASB is a modern combined-arms (joint warfare) concept that takes into account the prevailing geographical domains in the Asia-Pacific—air and sea along with the domains of space and cyber.

# The Problem of A2/AD

- Anti-Access (A2) is “action intended to slow deployment of friendly forces into a theater or cause forces to operate from distances farther from the locus of conflict than they would otherwise prefer. A2 affects *movement* to a theater”

# The Problem of A2/AD cont...

- On the other hand, Aerial Denial (AD) is “action intended to impede friendly operations within areas where an adversary cannot or will not prevent access. AD affects *maneuver within a theater*”

# Motive Behind ASB

- Just as the United States needed a credible way to reinforce the North Atlantic Treaty Organization (NATO) during the Cold War, so does it require a similar deterrence to reinforce our treaty allies in the Pacific.



# Cross-Domain Integration: “*Moneyball*” for the DoD

- Close integration across or between domains is called *cross-domain integration*.
- It seeks to produce synergistic effects by integrating different warfighting elements—in this case, across domains (air, sea, undersea, space, cyber, land).

# Playing Defense

- To protect assets that cannot maneuver quickly, the US must employ passive and active means to confuse the enemy.
- Integrated Air and Missile Defense (IAMD) systems must focus on the high priority threats, fusing systems from services & allies.
- PACAF is working to shore up its IAMD capability.

# Long-Distance Communications

- The Electromagnetic Spectrum will be contested (unlike today).
- Dominating Electronic Warfare early will be critical to winning the scouting battle and eventually prevailing in the conflict.

# Logistics/Sustainment

- Logistics and sustainment of forces have always presented a difficult problem, but with technologies, ASB looks to turn this problem into an opportunity.
- For example, fuels can be delivered to an air base via ship-to-shore pipeline.

# Logistics/Sustainment cont...

- Emphasizing interchangeability of components in procurement will expand these concepts.
- The addition of flexibility and resiliency through information automation and the leveraging of new technologies will make logistics a force multiplier and help overcome an adversary's attempts to disrupt operations.

# Benefits of ASB in the Asia-Pacific

- Before the 1986 Goldwater-Nichols Act initiated reforms, “joint” meant compromise—everyone gave up something for the sake of moving ahead. The prevailing mentality was *“I will stay out of your way; you stay out of mine.”*
- During the intervening years, innovations such as **AirLand** Battle moved “joint” into the realm of cooperation or partnering. The new mantra became *“We have to play together, so let’s play together nicely.”*

# Benefits of ASB in the Asia-Pacific cont...

- Given today's budget-stressed environment, together with the speed and dexterity of potential adversaries, "joint" must mean *collaboration and teamwork*.
- Collaboration entails mutual trust, mutual investment, shared responsibility, collective accountability, and communal benefit. A synonym for collaboration is "*pre-integration*."

# Framework

- ASB provides the services with a tangible benefit—the framework to train to defeat a A2/AD threat.
- Example: Exercise Valiant Shield (VS) {which actually presaged the ASB concept}. In June 2006 the first VS involved 22,000 personnel, 280 aircraft, and 30 ships, including the USS *Kitty Hawk*, USS *Abraham Lincoln*, and USS *Ronald Reagan* carriers IVO of Guam.



# Framework cont...

- NORTHERN EDGE (NE) is another Pacific Command exercise that prepares joint forces to respond to crises in the Asia Pacific. Conducted across Alaska, NE, like VS is an opportune event to test and flesh-out ASB concepts.

# Valiant Shield 14

## Air Sea Battle in the Pacific



# VS14

15-23 SEP 2014 IVO Guam

18,000 joint force service members from 30 units, including 200+ aircraft and 19 ships (including 2 Carrier Strike Groups). Executed from Andersen AFB and Marianas Island Range Complex, Guam



# Joint Forces

- George Washington & Carl Vinson Strike Groups
- B-52s Bombers
- F-22 Raptors
- E/A-18 Growlers
- F/A-18s (Navy and Marine)
- MV-22 Ospreys
- P-3/P-8
- KC-135s, KC-10s, and Civ Tanker
- Army THAAD & PATRIOT
- Space Aggressors



# Exercise Objectives

- Improve tactical readiness of forward deployed forces
- Improve TTPs in an A2/AD environment (Air Sea Battle)
- Improve and advance Joint Interoperability
- Conduct warfare area assessments
- Support Theater Strategic Communications
- Conduct way ahead for VS 16 (and NE 15)
- Support A2AD, Fires, & Cyber experiments



# VS14 Planned Vignettes

1. War At Sea 1 (Partial due to Wx)
2. Joint Strike 1 (Partial due to Wx)
3. War At Sea 2
4. Joint Strike 2
5. Island Seizure
6. Island Defense
7. ASW
8. Dual Strike Group IAMD





# Exercise Highlights

- Sink-Ex : (Ex) Fresno
  - 2 SM-2, 4 Surface and 2 air Harpoons, 5 Hellfire, 5” Gun, and 500lb bombs
  - LGBs from Bombers
- IAMD
  - Surface ships, Patriot, THAAD, USMC Radar
- Robust opposition forces
- Ops in a comms degraded environment



# Exercise Challenges

- **Weather not only has a Vote -- it has a Veto!**
  - Several events lost or degraded due to weather
- **Joint Communications**
  - Frequencies, Crypto, Radio Set-up
- **Andersen Infrastructure**
  - VS14 over-stressed Andersen AFB support capacity (space, computers, phones, dining, and lodging)





# NORTHERN EDGE

- NORTHERN EDGE (NE) 2015 was a joint training exercise scheduled for June 2015. NE is Alaska's premier joint training exercise designed to practice operations, techniques and procedures, and enhance interoperability among the services.

# NE and VS

- Twin Sons of Different Mothers
- NE odd Years VS even Years
- Goal is to build on each other
- (There is always a common complaint heard: “We had this problem last time! The lessons are just getting re-learned.”)
  - News Flash: Different Training Audience each time!

# A Cast of Thousands

- U.S. Third Fleet
  - Patrol and Recon Wings 10 & 11
  - 2nd Marine Aircraft Wing
  - 354th Fighter Wing
  - 18th Wing
  - 57th Wing
  - 4th Fighter Wing
  - 1st Fighter Wing
  - 2nd Bomb Wing
  - 509th Bomb Wing
  - 22nd Air Refueling Wing
  - 305th Air Mobility Wing
  - 154th Wing
  - 176th Wing
  - 459th Air Refueling Wing
  - USCG District 17
  - 3rd Wing
  - 
  - 
  -
- Carrier Air Wing 11
  - 1st Marine Aircraft Wing
  - 4th BCT, 25th ID
  - 15th Wing
  - 35th Fighter Wing
  - 53rd Wing
  - 552nd Air Control Wing
  - 69th Reconnaissance Group
  - 7th Bomb Wing
  - 60th Air Mobility Wing
  - 92nd Air Refueling Wing
  - 128th Air Refueling Wing
  - 155th Air Refueling Wing
  - 507th Air Refueling Wing
  - 477th Fighter Group
  - 673rd Air Base Wing

# Top Flight OpFor



F-16C Falcons from the 18th Aggressor Squadron, Eielson Air Force Base, Alaska

# Ground Action



Marine Recon drops in behind lines to  
scout Airfield prior to Army/Air Force  
assault and seizure

# Airborne Power



Soldiers assigned to 6th Brigade Engineer Battalion, 4th Infantry Brigade Combat Team (Airborne), 25th Infantry Division, loaded into a C-17 in order to jump into Allen Army Airfield, Fort Greely, Alaska

# Airfield Seizure



U.S. Air Force C-17 lands on a assault landing strip at Joint Pacific Alaska Range Complex

# Ground Power



Soldiers with the 6th Brigade Engineer Battalion, 4th Brigade Combat Team (Airborne), 25th Infantry Division, search for on a captured opposing forces member may possess at Allen Army Airfield



# Joint Air Ops



A U.S. Marine Corps EA-6B Prowler aircraft, attaches to the drogue basket of a U.S. Air Force KC-135R Tanker aircraft over the Gulf of Alaska

# Distributive Basing



A U.S. Air Force F-15E Strike Eagle aircraft assigned to the 4th Fighter Wing, Seymour Johnson Air Force Base, North Carolina, taxis the flight line

# Sea Power



USS Shoup (DDG 86) at the Port of Anchorage, Alaska, June 24, 2015. The Shoup was one of three U.S. Navy destroyers participating in Exercise Northern Edge in the Gulf of Alaska.

# Air to Air and Air to Ground



A U.S. Navy F/A-18F Super Hornets  
returning from a strike sortie

# Both 5<sup>th</sup> Generation Fighters in both future NE and VS



# Continuous Bomber Presence (CBP)

- The CBP on Andersen AFB Guam consists of B-1, B-2 and B-52 aircraft, enhances U.S. combat capability while minimizing risk to forces in theater. CBP aircraft accomplish regular training and exercise participation, advance and strengthen alliances and long-standing military-to-military partnerships, and ensure continued access to the global commons for all.

# The Good, The Bad, and the Ugly



# Where land restricts and sea lanes divide, air space connects

“Air power’s innate qualities of reach, speed and perspective give it an unrivaled ability to project influence globally,”. “Nations that possess advanced air power can and will exert their authority in any region, regardless of whether they have a geographic presence.”

--John Andreas Olsen, *Global Air Power*



# Air Power's History In Region

“Air power has played a critical role in the conflicts that have set the Asian political scene since World War II. From the Korean War to the Vietnam conflict, to the several wars between India and Pakistan, air forces have helped tip the strategic balance in war and frame the terms of peace,”

Robert Farley, assistant professor Patterson School of Diplomacy and International Commerce: *The National Interest* Jan 2015

# Bomber Operations

- The long-range capabilities of U.S. bombers are ideally suited to the vast distances and unique challenges of the Indo-Asia-Pacific region.
- Bombers provide a significant capability, enabling readiness and illustrating U.S. commitment to deterrence while offering assurances to allies and partners and complementing their military capabilities.

# CURRENT OPERATIONS

- The U.S. Air Force, in conjunction with U.S. Pacific Command (PACOM), has maintained a routine, rotational, forward-deployed, global strike capability in the Indo-Asia-Pacific region since March 2004 — an important precursor to the U.S. military rebalance to the region.

# The Mission

- CBP missions commonly integrate with U.S. and allied fighter and support aircraft, including the Royal Australian Air Force, Japanese Air Self Defense Force, Republic of Korea Air Force, Royal New Zealand Air Force, Royal Malaysia Air Force, Philippine Air Force and more.
- From the Malacca Strait to the Bering Sea, and from the North Pole to the South Pole, U.S. Bombers provide unmatched combat capability to the U.S. PACOM commander.

# Doing things Old and New

- Often, joint/multilateral CBP missions develop new tactics for air-sea. This is essential in coalition efforts to thwart the A2/Ad capabilities of potential adversaries.
- In missions ranging from single sorties to large force exercises, CBP bombers accomplish detailed integration with the U.S. and allied naval forces to create new tactics for air operations in maritime surface warfare.

-

# Big Stick

- The expanses of the Indo-Asia-Pacific region and the diverse number and types of assets in the region result in a “tactics development laboratory” for allied and coalition forces.



An AGM-86C Conventional Air-Launched Cruise Missile released from a B-52H

# ASB and the AOR



Questions?