

China's Role in Asia: Access and Anti-Access

The Institute for National Strategic Studies, The Center for Technology and National Security Policy Marshall Hall Room 155, Fort Lesley J. McNair, Washington DC 20319 July 24-25



DAY 1 – Thursday, July 24

08:15 - 08:30	Introduction and Administrative Remarks: James Keagle (CTNSP)		
08:30 - 10:00	Topic I: China's Role in Asia		
	<u>China's Asia Strategy</u> Dr. Phillip Saunders, Senior Research Fellow, Institute for National Strategic Studies, NDU <u>China's Rising Influence in Asia</u> Dr. Jim Przystup, Senior Research Fellow, Institute for National Strategic Studies, NDU		
10:00 - 10:15	Break		
10:15 - 12:00	Topic I Continued: Asian Perspectives on China's Role		
	Dr. Ruan Zongze, Minister Counselor, Embassy of the People's Republic of China in the USA Mr. Yoichi Kato, Bureau Chief, The Asahi Shimbun Dr. Hoang Anh Tuan, Counselor - Congressional Liaison, Embassy of Vietnam		
12:00 - 13:30	Luncheon Address: The Oil Card- Could a Blockade Cut Off China's Oil?		
	Mr. William S. Murray, Associate Research Professor, U.S. Naval War College		
13:30 - 15:00	Topic II: China's Access to Asia		
	Economic Access & Infrastructure Mr. Charles W. Freeman III, Chairholder, Freeman Chair in China Studies, CSIS Energy Transportation and Sea Lanes of Communication Dr. Bernard Cole, Professor of International History, National War College		
15:00 - 15:15	Break		
15:30 - 17:00	Topic II: China's Access to Asia		
	PRC Naval Strategy & Development Rationales Mr. Daniel M. Hartnett, China Analyst, CNA		
	<u>PRC Power Projection & Military Diplomacy</u> <i>Mr. Roy Kamphausen, Vice President for Political and Security Affairs and Director,</i> <i>Washington, DC Office at the National Bureau of Asian Research</i>		
17:00	END		

DAY 2 – Friday, July 25

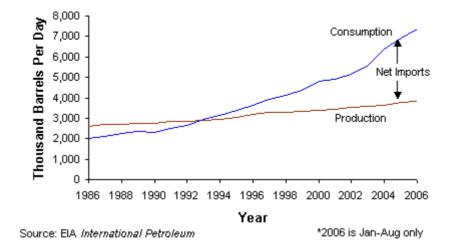
08:15 - 08:30	Administrative Remarks: James Keagle (CTNSP)		
08:30 - 10:30	Topic III: China's Anti-Access Strategy		
	<u>PLA Naval Capabilities</u> Mr. Ronald O'Rourke , Navy Analyst, Congressional Research Service		
	<u>PLA Anti-Access Strategies – Taiwan and Beyond</u> RADM Michael McDevitt, USN (Ret), Director Strategic Studies, CNA		
	Mr. Paul S. Giarra, Senior Program Manager, Strategic Assessment Center, Science Applications International Corporation		
10:30 - 10:45	Break		
10:45 – 12:15	Topic II Continued: China's Anti-Access Strategy		
	<u>China's Approach to Space and Counter-space</u> <i>Mr. Kevin Pollpeter, China Program Manager, Center for Intelligence Research and</i> <i>Analysis, Defense Group Inc.</i>		
	<u>PLA "Legal Warfare" and Maritime Sovereignty Claims</u> <i>Mr. Peter A. Dutton, Associate Professor of Strategic Studies, China Maritime Studies</i> <i>Institute, U.S. Naval War College</i>		
12:15 – 13:45	Luncheon Address		
	Ambassador Stapleton Roy, Vice Chairman, Kissinger Associates Inc.		
13:45 - 14:00	Break		
14:00 - 15:30	Chinese Objectives and Strategies & Policy Implications for the U.S., Region, and the World		
	Dr. Cynthia Watson, Chair, Department of Security Studies, National War College, NDU Mr. Dan Blumenthal, Resident Fellow in Asian Studies, American Enterprise Institute Dr. Phillip Saunders, Senior Research Fellow, Institute for National Strategic Studies,		
	NDU		
15:30	END		

China's Search for Energy

Bernard D. Cole, Ph.D. Captain, USN (Ret.) Professor, National War College

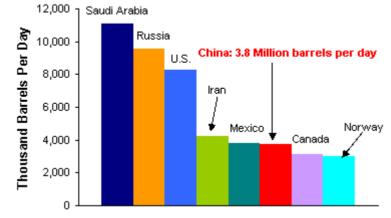
Points of Discussion

- Energy Demands
- Reliance on Imports
- Sources of Energy: Domestic, Foreign
- Strategic Impact of Energy Requirements
- Affects on U.S. Security: Partnership or Rivals



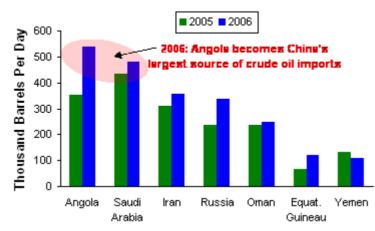
China's Oil Production and Consumption, 1986-2006*

Top World Oil Producers, 2005

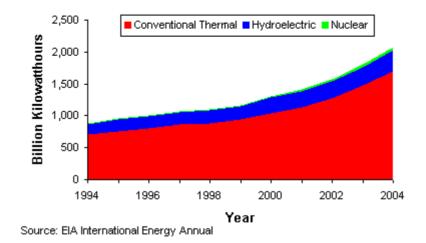


Source: EIA International Petroleum Monthly

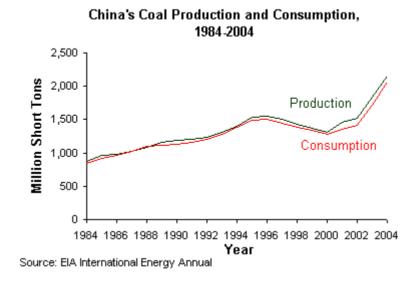
Top Sources of China's Crude Oil Imports, 2005 and 2006*



Source: FACTS, Inc. China Oil and Gas Monthly *2006 data is January through June only



Electricity Generation in China by Type, 1994-2004



China's coal industry



The Importing Issue

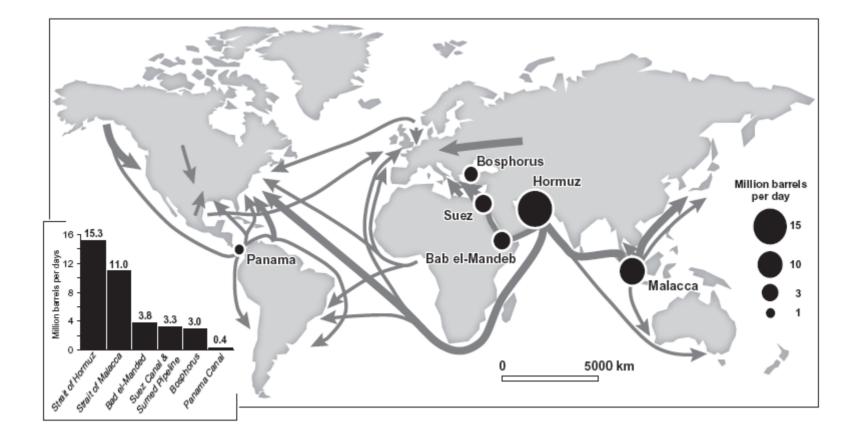
From	To Distance (nm)		Transit Time: days @ 16kts
Busan	Singapore	2,473	6.5
Singapore	Abadan	3,605	9.4
Shanghai	Abadan	3,717	9.7
Singapore	Fremantle	2,220	5.8
Fremantle	Abadan	5,411	14.1

SLOCs and Pipelines

SLOCs: Coastal, East China Sea, South China Sea, Indian Ocean Narrows: Malacca / Sunda / Lombok / Sulawesi / San Bernadino / Mindinao / Andaman Sea / 9 Degree Channel / Hormuz / Bab el-Mandab

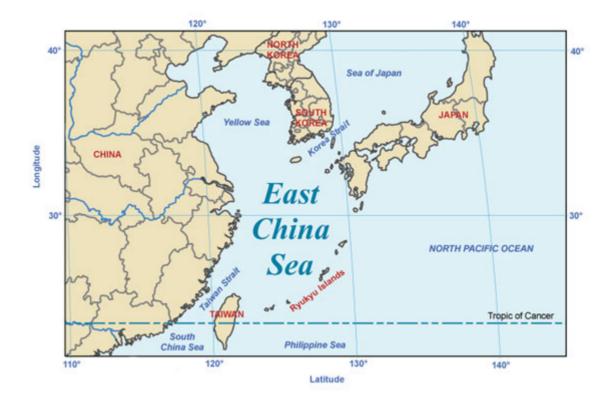
<u>Pipelines</u>: Kazakhstan, Thailand, Burma....

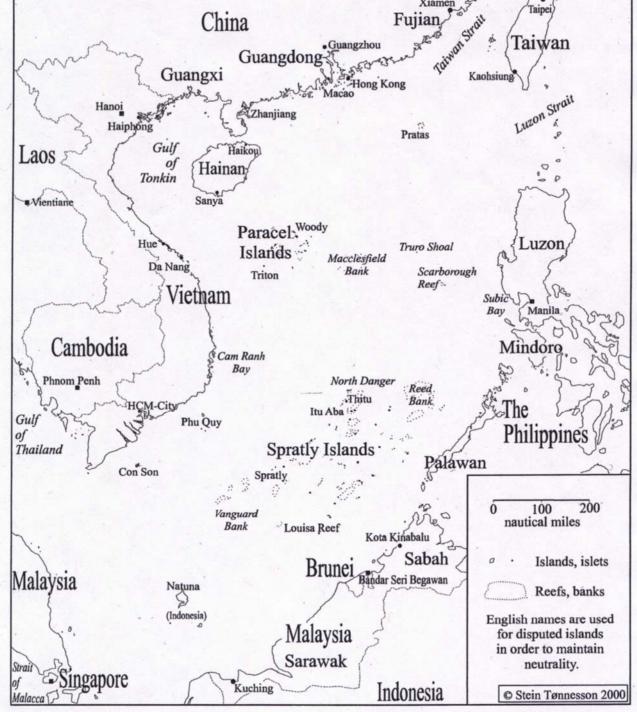
SLOCS





East China Sea



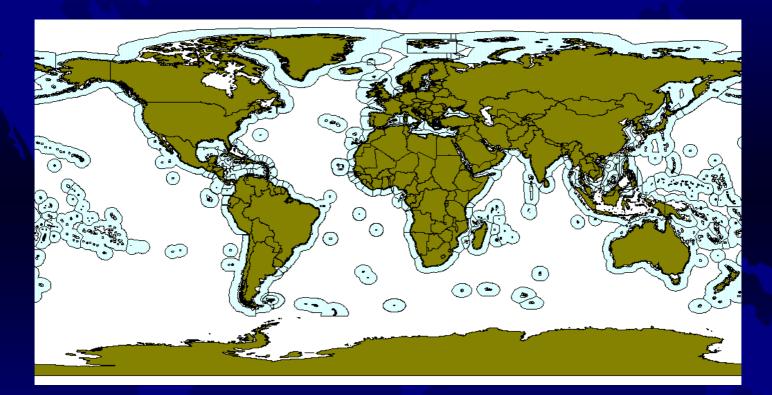


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www.middlebury.edu/~scs

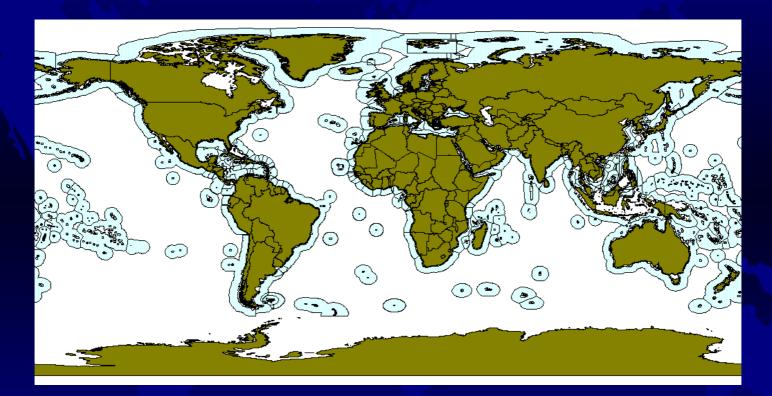


COLLISION COURSE IN THE EEZ LEGAL WARFARE AND THE BATTLE FOR IDEAS



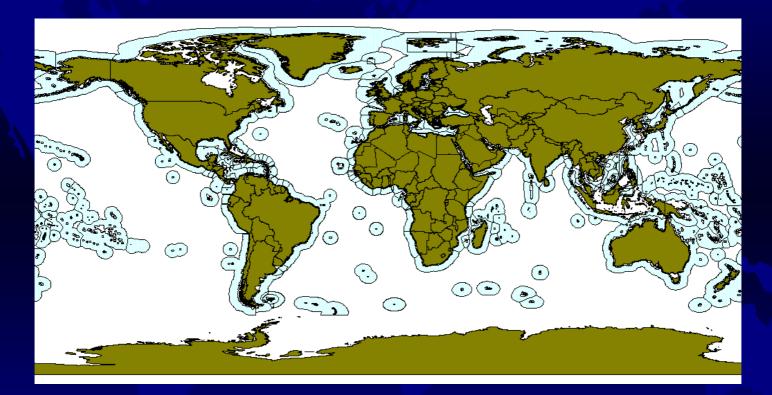
Peter Dutton China Maritime Studies Institute

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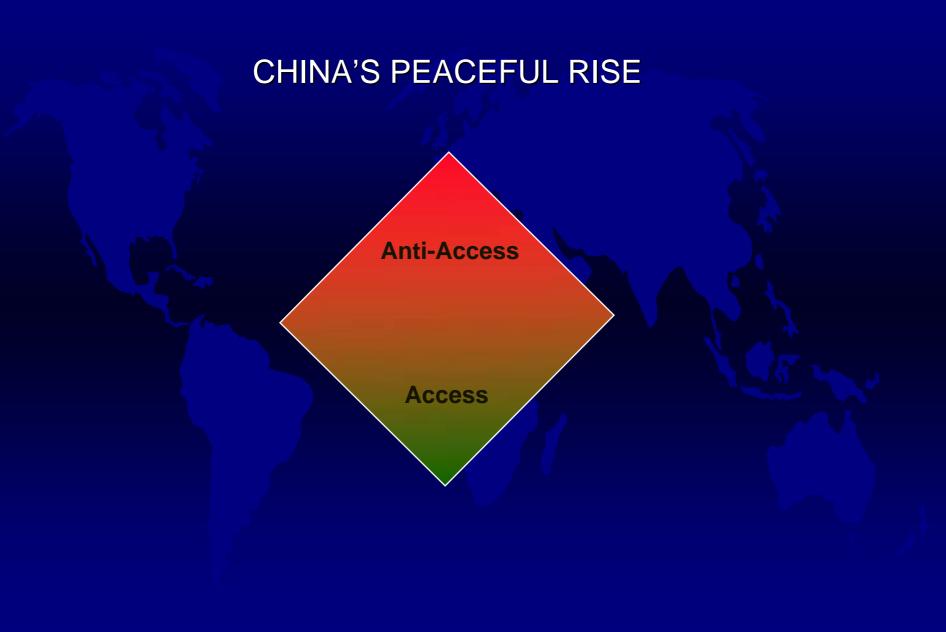


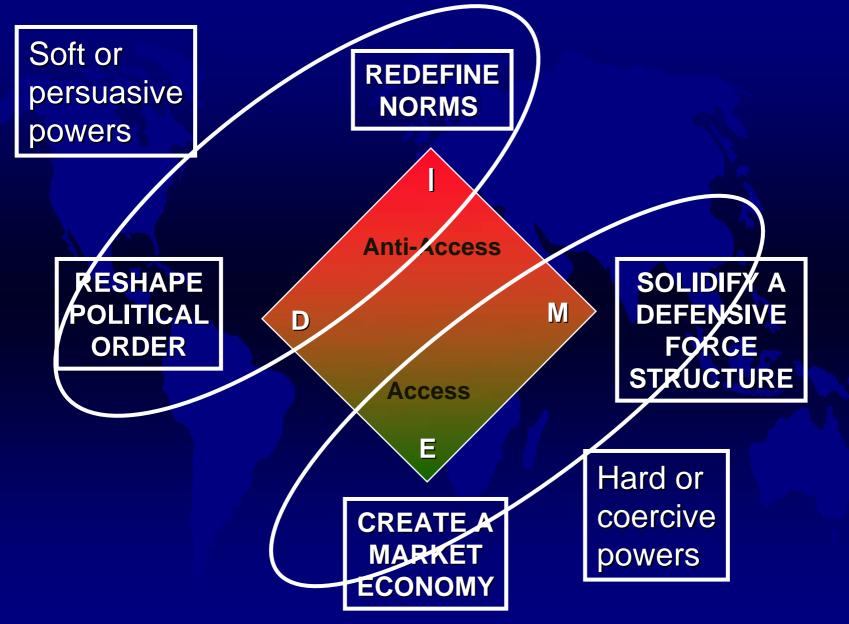
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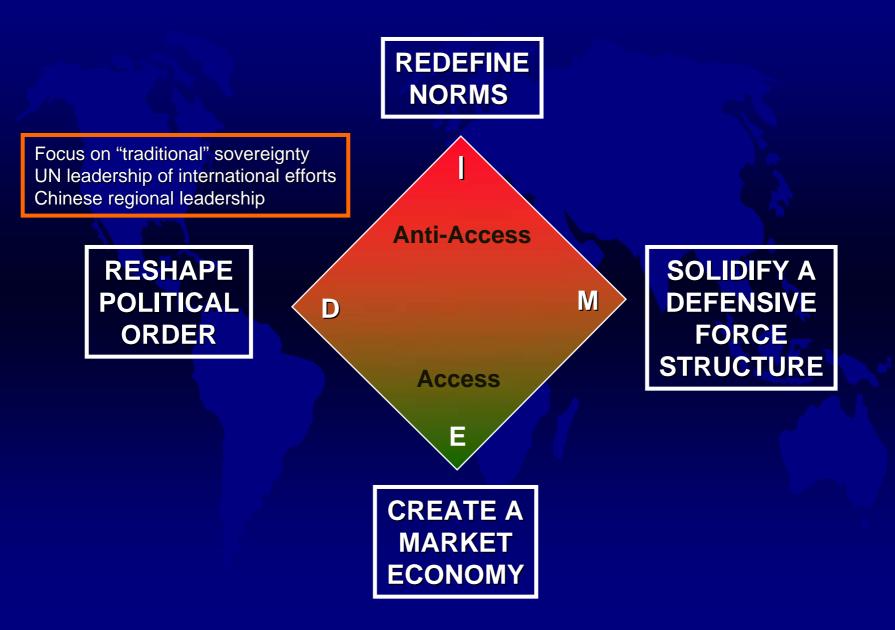
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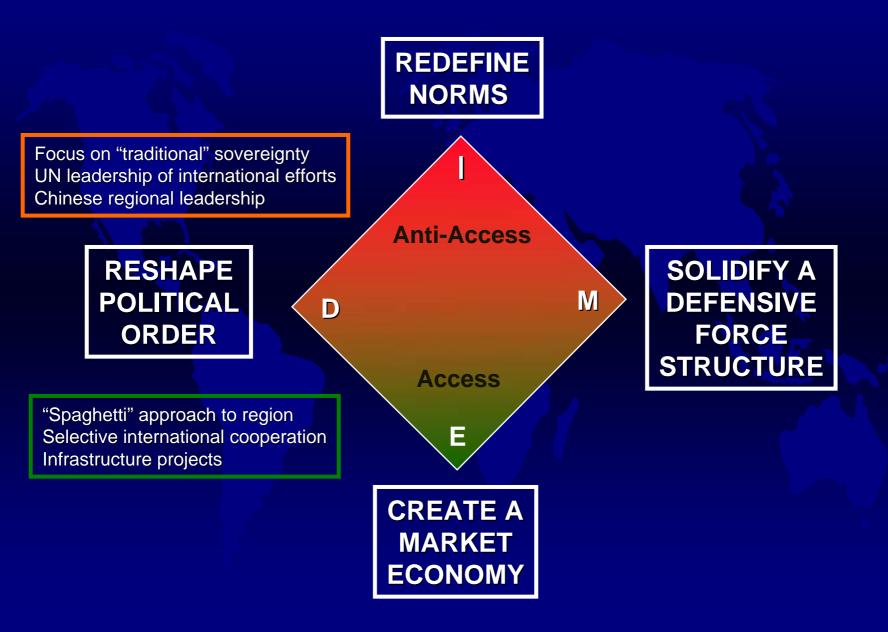


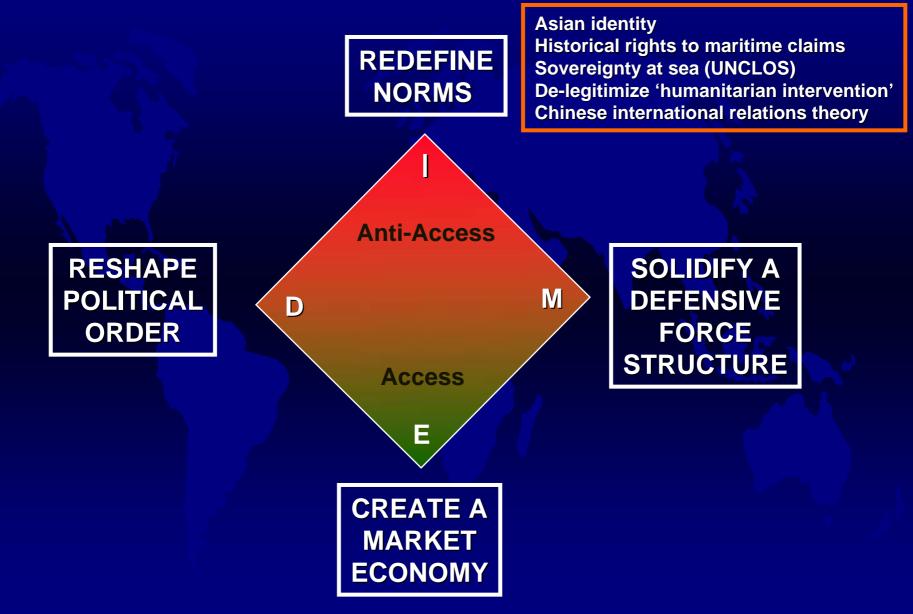
Peter Dutton China Maritime Studies Institute

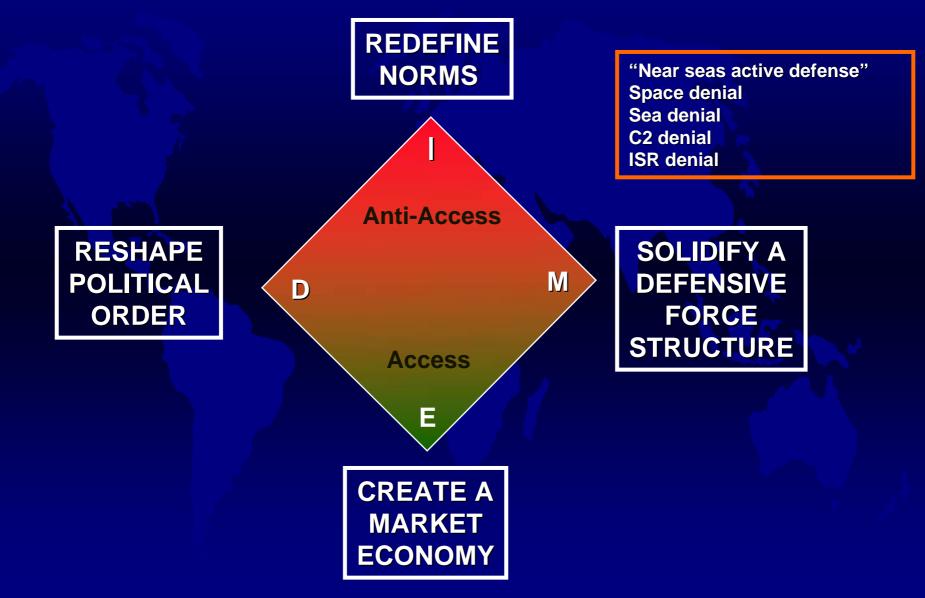


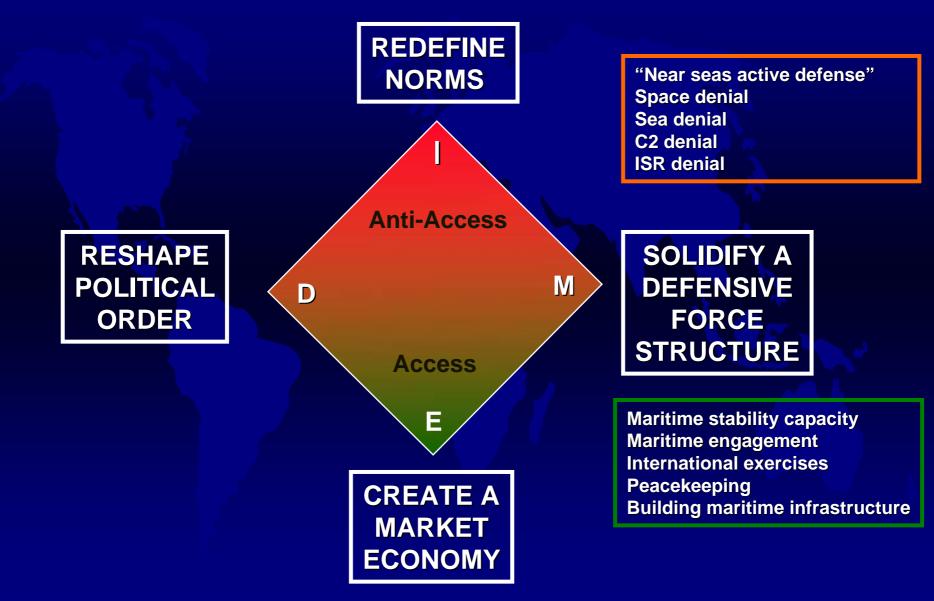


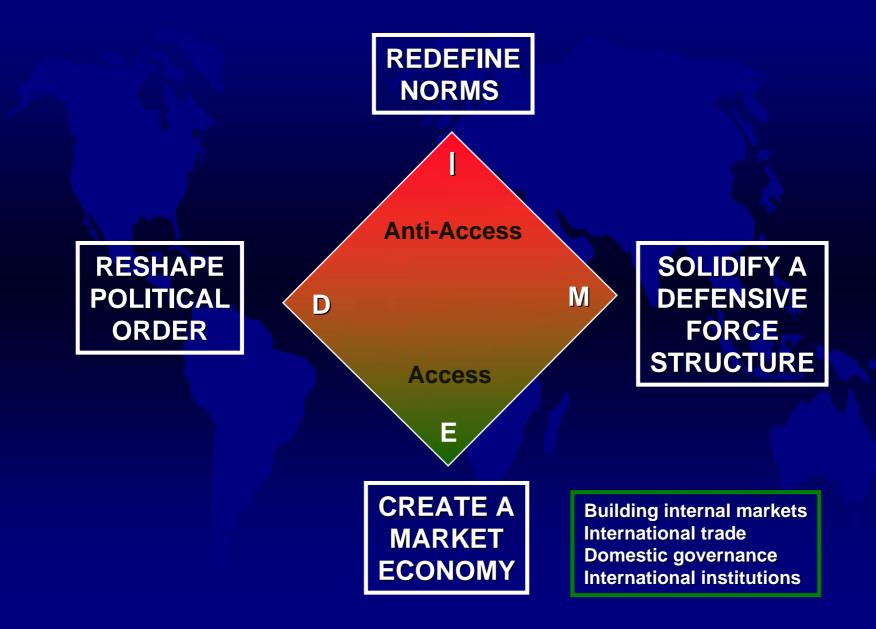












REDEFINING NORMS: CHINESE VIEWS ON LAW AND CONFLICT Achieving legitimacy through the "perfection of international law."

Renmin Haijun May 29 2006 on Legal Warfare Doctrine

"Military Warfare under modern high technology conditions is a political and legal battle of safeguarding national sovereignty and territorial integrity against enemy countries' military interference."

"Using law as a weapon,...seize the opportunity to grab the initiative."

<u>Four "firsts" – resources, pretexts, initiative and strength</u> Be far-sighted... Provide a pre-text for military action... Put the tremendous effects of 'soft killing' to good use... Seize the right moment...



"Searching for the legitimacy of military action"

"Legal warfare not only penetrates the entire process of local sea war, but is also an important means to strive for the initiative in military action, even becoming a new form of combat."

"Legal warfare is a 'soft weapon' to obtain ... public opinion and the support of the international community."

From..."Legal Warfare, New Forms of Combat and Future Naval War." Director of the Political Department of the South China Sea Fleet

CHINESE LEGAL WARFARE "Three Warfares" and the nexus to Taiwan

Taipei Kuo-fang Cheng-t'se P'ing-lun/ Taiwan Defense Affairs, Sept 2004

In December 2003 The General Political Department of the PLA added three new types of warfare to the Regulations of the PLA Political Work: Public Opinion Warfare Psychological Warfare Law Warfare

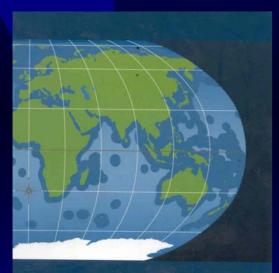
"Law warfare means to generate legal combat based on domestic law, international law and international conventions."

Preparation of the battle space "to obtain human will and thinking as the aim."

"Declare the adversary's military illegitimacy and manifest the legitimacy of self-defense."

CHINESE LEGAL WARFARE Strategic communications...beyond Taiwan

Developing an "Asian consensus"



Guidelines for Navigation and Overflight in the Exclusive Economic Zone A Commentary

EEZ Group 21

Ocean Policy Research Foundation Tokyo, Japan

"Handling sudden incidents"

"Handling sudden incidents according to international law is common international practice."

"Law warfare must be effectively developed...to explain military actions and criticize perpetrators of sudden incidents as part of psychological and legal propaganda offensives."

Zhongguo Junshi Kexue, China Military Science Volume 6-2006

Maritime Zones



200 NM

8/9/01 **24 NM**

10

EEZ – US PERSPECTIVE

President Reagan:

I proclaim ... an <u>Exclusive</u> <u>Economic Zone</u> ... which will provide United States jurisdiction for mineral resources out to 200 nautical miles ... Within this zone all nations will continue to enjoy the high seas rights that are not resource related, including the freedoms of navigation and overflight.



EEZ – US PERSPECTIVE

Residual rights include use of Zone for all military activities not otherwise prohibited by international law.

Surveillance and reconnaissance flights are not prohibited by international law and are not a threat to coastal state's national security. Due regard—safety of flight.

Renewed Russian military reconnaissance flights over EE Z of Canada, Norway, UK and others

EEZ - THE CHINESE PERSPECTIVE

"Freedoms of navigation and overflight in the EEZ do not include the freedom to conduct military and reconnaissance activities in the EEZ and its superadjacent airspace. Such activities encroach or infringe on the security interests of the coastal State, and can be considered a use of force or a threat to use force..."

> "Coastal States have the right to restrict or even prohibit the activities of foreign military vessels and aircraft in and over their EEZ."

Dr Ren Xiaofeng and Sr. Col. Cheng Xizhong Marine Policy, Vol. 29, pp. 139-146 (2005)

EEZ - THE CHINESE PERSPECTIVE

Hydrographic surveys constitute battlefield preparation and thus a threat of force in violation of the UNCLOS principle of peaceful uses.

> Sr. Col. Cheng Xizhong Marine Policy, Vol. 28, pp. 25-27 (2004)

"The Taiwan Strait is China's EEZ...The Chinese side has always regarded the unapproved passage of warships, especially fully armed warships, as an act of provocation."

Zhou Zhonghai, interview (2008)

UNCLOS and the Two 'Due Regards'

- Coastal State duties include responsibility to exercise "due regard" to the rights and duties other States and to act in a manner compatible with the LOSC (Art. 56.2)
- Other States, in exercising their rights of freedom of navigation, must have "due regard" for rights and duties of coastal State (Art. 58.3)

• Art. 59: Un-attributed rights or jurisdiction (residual rights):

- -- Any conflict over such rights "should be resolved <u>on the basis of equity</u> and in the light of all the relevant circumstances taking into account the respective importance of the interests involved to the
 - The parties
 - The international community as a whole.

LOOKING THROUGH THE LENS OF VALUES...

ON A COLLISION COURSE AT SEA?

US: EEZ is a zone of international waters

Coastal States have limited, specified jurisdictional authority related to resources and pollution.

Other rights, including military activities, belong to the international community. PRC: EEZ is a coastal State's zone

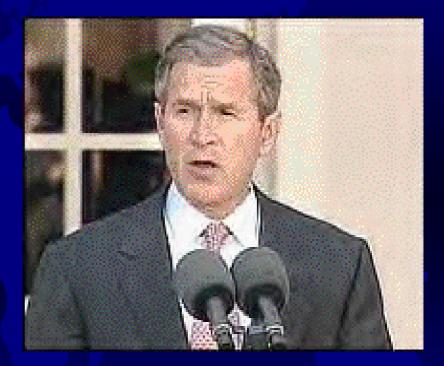
Coastal States have sovereign-like authority and primacy of interests over the international community.

Legitimate international military activities are limited to passage.

The 2001 EP-3 Incident provided China an international stage from which to articulate and apply their perspective.

Official US Statement

"From all the evidence we've seen, the United States aircraft was operating in international airspace in full accordance with all laws and regulations and did nothing to cause the accident."



George W. Bush President of the United States

Official PRC Statements



Jiang Zemin, President PRC

The U.S. must bear full responsibility



MoFA: Foreign aircraft on reconnaissance missions in the airspace over the EEZ "pose a serious threat to the national security of China," violate UNCLOS and principle of over flight freedom, and must be stopped.

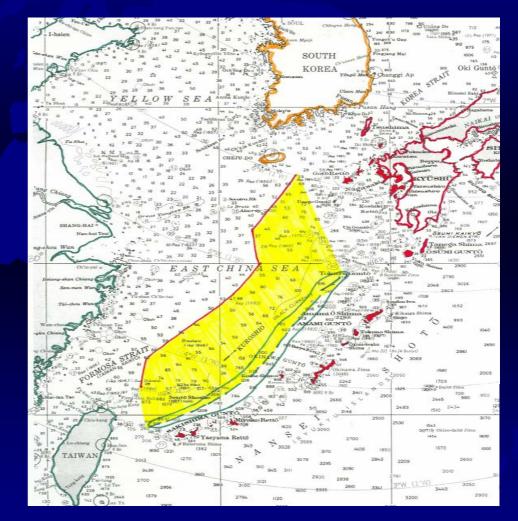


Xinhua: "Reconnaissance flights are threats to the national security and peaceful order of coastal states."

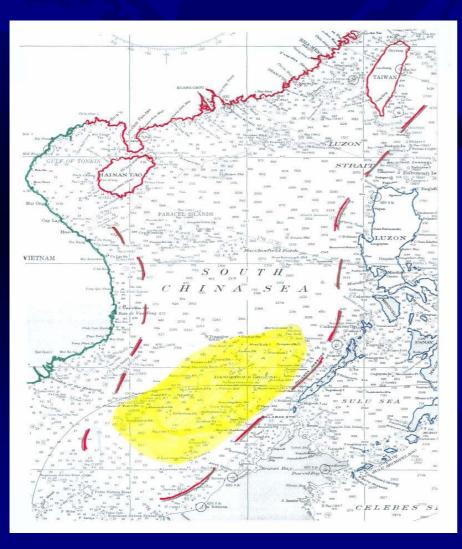
LEGITIMACY AND SEA CONTROL: THE NEXUS BETWEEN CHINA'S INTERNATIONAL LAW PERSPECTIVES, MARITIME CLAIMS AND STRATEGIC IMPERATIVES

"Once the curtain descends on the Sino-Japanese dispute over the East Sea, then mainland China will be able to concentrate the East Sea fleet's power to resolve the Taiwan problem. Moreover, the resolution of the Sino-Japanese East Sea dispute would enable China to successfully expand sea control in the direction of the East Sea."

> Liu Qia and Liu Yu Modern Navy October 2007



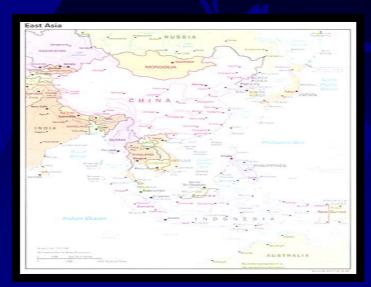
LEGITIMACY AND SEA CONTROL: THE NEXUS BETWEEN CHINA'S INTERNATIONAL LAW PERSPECTIVES, MARITIME CLAIMS AND STRATEGIC IMPERATIVES



South China Sea Code of Conduct But... Philippines Baselines Bill

"Saying it will not yield any part of Philippine territory to China..."

"Chinese officials have been putting pressure on both chambers of Congress..."



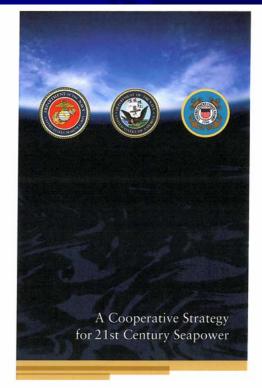


SOME REMAINING QUESTIONS

GIVEN EXISTING DIFFERENCES, WHAT IS THE WAY FORWARD?

IS THERE ROOM FOR COOPERATION UNDER CURRENT CONDITIONS?

MIGHT THERE BE CONVERGENCE OF PERSPECTIVES BEYOND TAIWAN?



OCTOBER 2007

A FUTURE CONVERGENCE? Balancing National and International Authorities

Too much maritime sovereignty is destabilizing

Authority: UNCLOS interpretations based on enhanced jurisdictionalization of the maritime zones could add to littoral instability that threatens the global economy.

Capacity: Weak coastal states with sovereignty-like jurisdiction that they cannot enforce are a danger to the entire core of countries integrated into the global order because they create sanctuaries for destabilizing elements.





The Institute for National Strategic Studies The Center for Technology and Security Policy National Defense University

> China in Asia: Access and Anti-Access

China's Maritime Reconnaissance-Strike Complex:

Land Mobile, MaRV'd Anti-Ship Ballistic Missiles (ASBMs)

> Paul S. Giarra July 25, 2008

Maritime supremacy in the Pacific is a traditional American core military competence, and strategic oceanic mobility a fundamental premise of American security strategy. Chinese writings now propose new maneuverable re-entry anti-ship ballistic missile capabilities sufficient to overturn presumptive American maritime strategic superiority in an afternoon.[1]

The United States depends upon command of the oceans for access to global markets, and to leverage military strategic and tactical mobility. China has expressed at length its inherent need to challenge this fundamental American advantage. Chinese analysts and leaders have written extensively on the subject of challenging this American freedom of movement across the Pacific, and on being able to hold American military forces at great distance by controlling the three successive Pacific island chains.

The prospect of Chinese MaRV'd ASBM development, especially in combination with mobile missile launchers, presents great challenges for American and allied intelligence analysts. Understanding the Chinese resources, capabilities, and intentions necessary to support and enable a significant anti-access strategy -- scientific and technical, industrial, organizational, and military -- is a tremendous political, operational, and intelligence task. Given the potential strategic consequences, practical, actionable understanding as early as possible is vital for two reasons: first, to preclude Chinese strategic surprise; and second, to avoid over-reaction by not having a firm grasp of the realities of emerging Chinese military-operational capabilities, and in case of Chinese setbacks, failures, or Beijing's subsequent re-direction of strategic priorities and resources.

[1] CRS Report for Congress: *China Naval Modernization: Implications for U.S. Navy Capabilities* — Background and Issues for Congress, November 18, 2005, p. 8, by Ronald O'Rourke, Specialist in National Defense, Foreign Affairs, Defense, and Trade Division:

"Although ballistic missiles in the past have traditionally been used to attack fixed targets on land, observers believe China may now be developing TBMs equipped with maneuverable reentry vehicles (MaRVs). Observers have expressed strong concern about this potential development, because such missiles, in combination with a broad-area maritime surveillance and targeting system, would permit China to attack moving U.S. Navy ships at sea. The U.S. Navy has not previously faced a threat from highly accurate ballistic missiles capable of hitting moving ships at sea. Due to their ability to change course, MaRVs would be more difficult to intercept than non-maneuvering ballistic missile reentry vehicles. According to one press report (Yihong Chang and Andrew Koch, "Is China Building A Carrier?" *Jane's Defence Weekly*, August 17, 2005), 'navy officials project [that such missiles] could be capable of targeting US warships from sometime around 2015. '



Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb

* Director: Stanley Kubrick

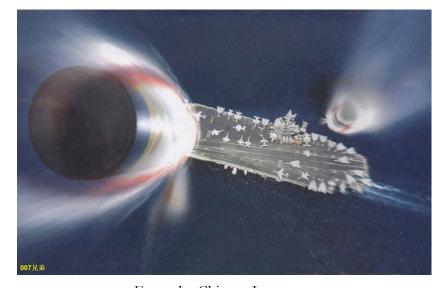
* Main Cast: Peter Sellers, Peter Sellers, George C. Scott, Sterling Hayden, Keenan Wynn, Slim Pickens, James Earl Jones

- * Release Year: 1964
- * Country: US/UK

Plot

In 1964, with the Cuban Missile Crisis fresh in viewers' minds, the Cold War at its frostiest, and the hydrogen bomb relatively new and frightening, Stanley Kubrick dared to make a film about what could happen if the wrong person pushed the wrong button -- and played the situation for laughs. Dr. Strangelove's jet-black satire (from a script by director Stanley Kubrick, Peter George, and Terry Southern) and a host of superb comic performances (including three from Peter Sellers) have kept the film fresh and entertaining, even as its issues have become (slightly) less timely. Loaded with thermonuclear weapons, a U.S. bomber piloted by Maj. T.J. "King" Kong (Slim Pickens) is on a routine flight pattern near the Soviet Union when they receive orders to commence Wing Attack Plan R, best summarized by Maj. Kong as "Nuclear combat! Toe to toe with the Russkies!" On the ground at Burpleson Air Force Base, Group Capt. Lionel Mandrake (Peter Sellers) notices nothing on the news about America being at war. Gen. Jack D. Ripper (Sterling Hayden) calmly informs him that he gave the command to attack the Soviet Union because it was high time someone did something about fluoridation, which is sapping Americans' bodily fluids (and apparently has something to do with Ripper's sexual dysfunction). Meanwhile, President Merkin Muffley (Sellers again) meets with his top Pentagon advisors, including super-hawk Gen. Buck Turgidson (George C. Scott), who sees this as an opportunity to do something about Communism in general and Russians in particular. However, the ante is upped considerably when Soviet ambassador de Sadesky (Peter Bull) informs Muffley and his staff of the latest innovation in Soviet weapons technology: a "Doomsday Machine" that will destroy the entire world if the Russians are attacked. ~ Mark Deming, All Movie Guide

The Slim Pickens View of ASBMs



From the Chinese Internet

http://bbs.cjdby.net

Review -- Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb is widely regarded as the screen's greatest satire, a film that superbly encapsulates the fear and paranoia of the Cold War. There is not a sequence in the film in which the dialogue is not quotable -- indeed, there are so many well-remembered moments that viewers and critics will differ on the best, though surely the sight of Major Kong (Slim Pickens) waving his cowboy hat as he rides the bomb into oblivion is among the most enduring images of its era. As was consistently the case in his career, director Stanley Kubrick brilliantly matches actors with their roles, from Peter Sellers' three-character performance to the screen debut of James Earl Jones, whom Kubrick had spotted in a stage play. Similarly, George C. Scott, who plays the hawkish general Buck Turgidsdon, considered Strangelove among his greatest screen achievements. Every performance is top-notch, and many Kubrick trademarks can be found in the film, from the visual style to the shift to a hand-held camera when the Air Force base is attacked to the sparse and ironic use of music. ~ Richard Gilliam, All Movie Guide

Cast

- * Peter Sellers Dr. Strangelove
- * Peter Sellers Group Capt. Lionel Mandrake
- * Peter Sellers President Merkin Muffley
- * George C. Scott Gen. Buck Turgidson
- * Sterling Hayden Gen. Jack D. Ripper
- * Keenan Wynn Col. Bat Guano
- * Slim Pickens Maj. T.J. "King" Kong
- * James Earl Jones Lt. Lothar Zogg

Introduction

• My purpose is to introduce the idea of Chinese landmobile, MaRV'd, ASBMs.

• The serious work will have to be done on a much broader scale -- consider the ASW level of effort during the Cold War.

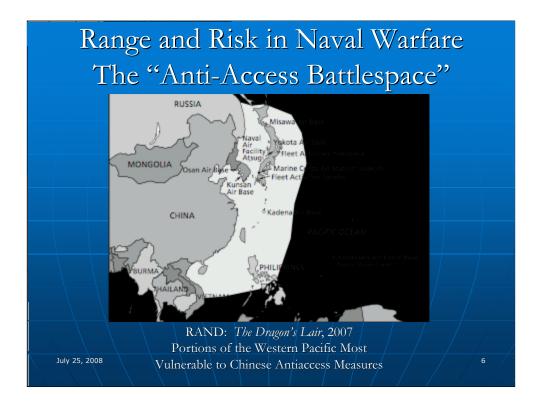
• There is speculation that the PLA will test this capability soon, against a mobile target at sea.

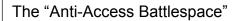


Introduction

- Chinese ASBMs are the manifestation of the advent of network warfare.
 - Without targeting the OTHT networks necessary for this capability, naval surface platforms are at significant risk.
- Part of a larger briefing



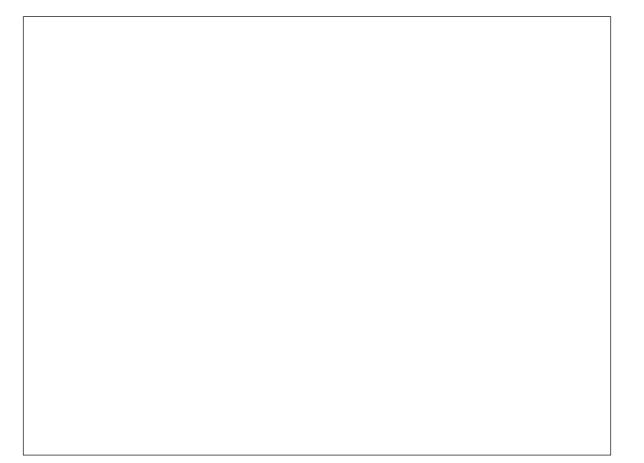




• Maritime commanders try to range vessels at sea through stealth or weapons range because the offense -- firing first from the greatest range -- has the advantage.



• Since modern naval vessels are "highly integrated physical platforms" (i.e., therefore vulnerable to disruption and mission kill), naval weapons have a high probability of at least mission kill if they can hit the target.



- As at Gettysburg:
 - -- weapons are way ahead of tactics, and defenses.

• Therefore, if at all possible, Naval commanders must and will maneuver to avoid contact if the correlation of forces is unfavorable.

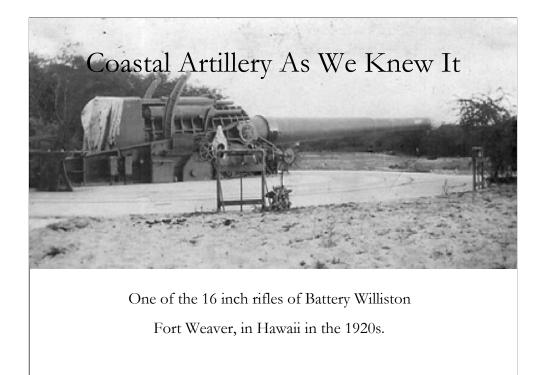


• The inherent range advantage of Chinese MaRV'd ASBMs able to range surface ships at sea puts the Navy at severe risk --

what amounts to coastal artillery of extraordinary range

(1000s of miles vs. < 30 miles)

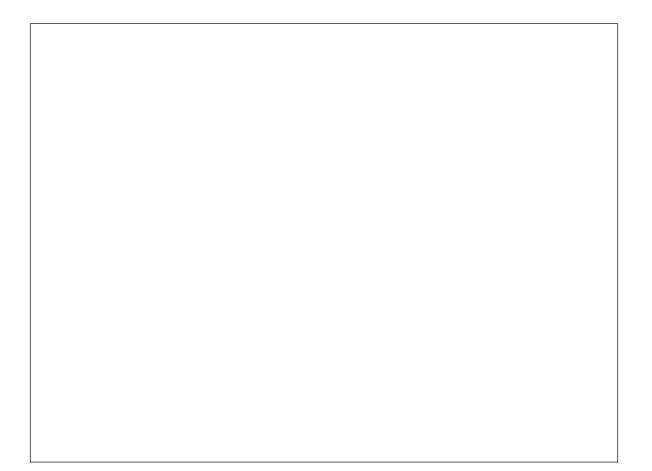


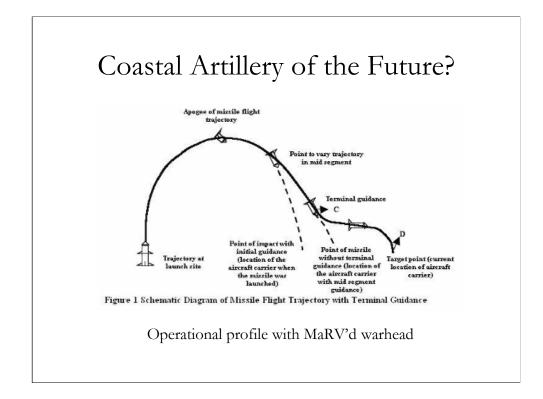


http://www.cdsg.org/home.htm

Photograph courtesy Phil Whaley (pwhaley2@cogeco.ca)





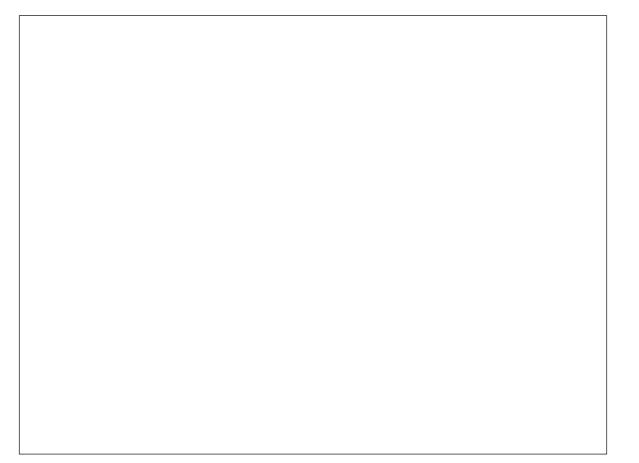


Courtesy of Richard Fisher, Jr. International Assessment and Strategy Center



Numbers Count

- There are only about two dozen capital ships in the U.S. surface fleet:
 - 11 or 12 heavy aircraft carriers operating in carrier strike groups; and
 - 12 aviation capable "straight deck" amphibious assault ships operating in expeditionary strike groups



Numbers Count

- Even adding to these numbers the other high value units of the U.S. and potential coalition fleets
 - major combatants, command ships, replenishment ships, hospital ships, and transports

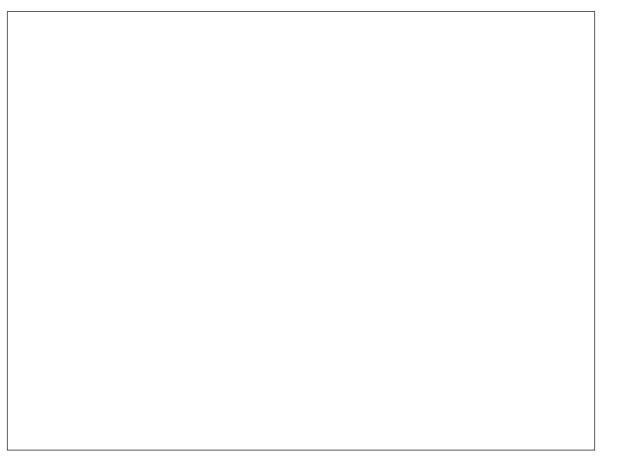
there are relatively few capital ship targets.

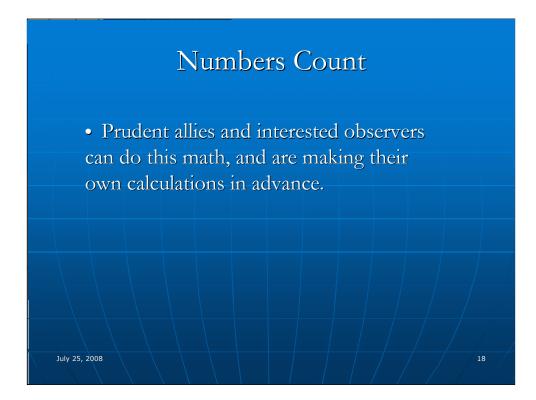


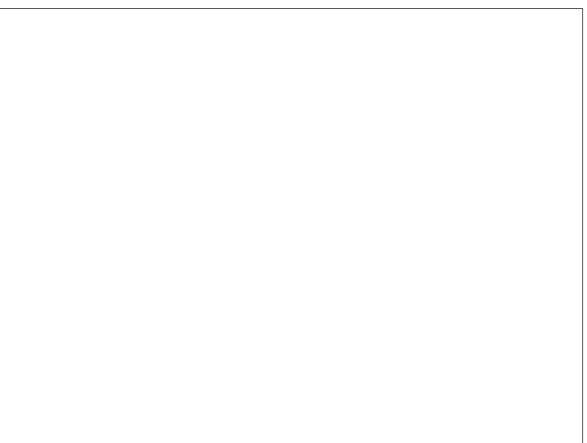
Numbers Count

• With so few high value assets, a successful attack against even one of these ships, let alone a loss, would be psychologically devastating at home and operationally debilitating at sea.

• The potential result would be a significant decrease in overall U.S. Naval power in the region.







• ASBMs are an extremely attractive, self-reinforcing option for China.

Chinese ASBMs are technically feasible
 -- and unprecedented

Chinese ASBMs are potentially destabilizing
 -- to U.S. strategic disadvantage.

• Chinese land mobile, MaRV'd ASBMs represent a significant leap forward, tilting the military-strategic balance of power in the Asia-Pacific.

• They raise the potential for significant surface ship "No-Go" zones, well beyond tactical radius of carrier air wings, thus negating our investment in short range air platforms.

• This is a lesson in "Jointness": the other Services have a significant strategic stake in this ostensibly maritime issue.

• It is a reminder that in the Asia-Pacific, when the U.S. Navy catches cold, the other Services sneeze.

• Furthermore, the same enabling missiles and OTH-T systems hold land-based airfields at risk throughout the region.

• ASBMs present a rationale for extensive Joint and Combined all-source collection and integrated analysis.

• They are an illustrative case for intelligence collection, analysis, force structure and resource planning.

• This briefing began as a paper on how to organize information collection and analysis when confronted by complex challenges.

July 25, 2008

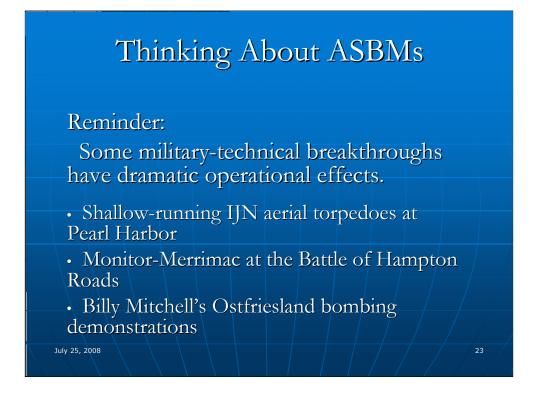
http://www.homeofheroes.com/wings/part1/6_survival.html

In the fall of 1920 Captain Chester Nimitz was tasked with overseeing some bombing tests on the old Spanish-American War ship, the U.S.S. Indiana. The Navy wanted to learn just how much damage bombs dropped from the air could wreak on its warships. An ancillary benefit would be the ultimate rebuttal of any claims that a warships could be sunk by these bombs. Few military men beyond Mitchell and a few old admirals like Admiral Winterhalter believed such a feat possible.

The tests were conducted under the most secret of conditions...no media coverage and results would be divulged only as necessary. Navy airplanes attacked the old vessel with dummy bombs while Naval technicians assessed the probable damage real bombs might have inflicted. Then underwater charges were exploded near the ships hull. The concussion split seams and ruptured the old ships hull, giving evidence to a concept in bombardment that would later become important to Mitchell--near misses could wreak more damage than a direct hit. As the testing neared its completion, the still floating Indiana was run aground where bombs were affixed to her deck to finish the destruction.

When the testing was done the Navy released an innocuous statement, not widely publicized, that it was improbable that a modern battleship could be sunk from the air. With that, the admirals hoped the question would go away.

Unfortunately for the Navy, somehow two pictures of the ruptured deck of the Indiana found their way into the London Illustrated News. Still the Navy tried to downplay the results of their tests--until Billy Mitchell showed up to testify before Congress in January, 1921.

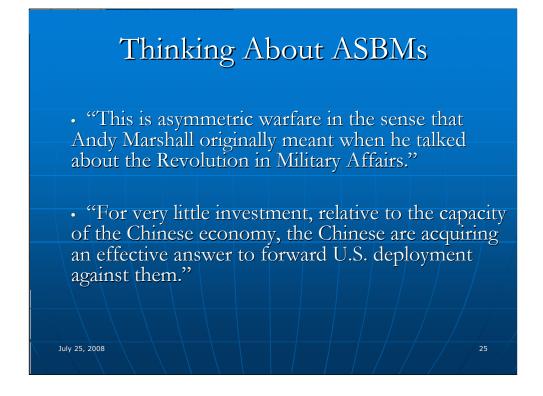


The Battle of Hampton Roads, often called the Battle of Monitor and Merrimack, was a naval battle of the American Civil War, famous for being the first fight between two steam powered iron-covered warships, or "ironclads", the USS Monitor, an entirely new design, and the CSS Virginia (which had been rebuilt from the burned-out hull of the USS Merrimack). The principal confrontations took place on March 8 and March 9, 1862, off Sewell's Point, a narrow place near the mouth of Hampton Roads, Virginia.

The naval battle lasted two days. The first day was the debut of Virginia and was fought without Monitor. Havoc was wreaked upon the wooden Union ships, and the day ended with the Confederate side at a decided advantage. However, on the second day Monitor arrived and initiated the famous action known as the duel of the ironclads. Although the battle was inconclusive, it is significant in naval history. Prior to then, nearly all warships were made primarily of wood. After the battle, design of ships and naval warfare changed dramatically, as nations around the world raced to convert their fleets to iron since they had shown themselves to be clearly superior to wooden ships in their ability to withstand enemy fire.



Wang Hucheng, "The U.S. Military's 'Soft Ribs' and Strategic Weaknesses', *Liaowang*, vol. 27, reprinted in *Xinhua Hong Kong Service*, 5 July 2000, in FBIS-CHI-2000-0705, 25 July 2000.



Senior American China expert, Correspondence with Paul Giarra, June 28, 2007

"Strategic Mobility vs. Anti-Access" Competition

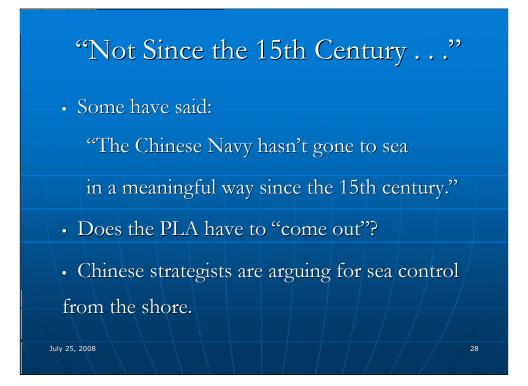
• This competition is about far more than just whatever missile the PLA might develop.

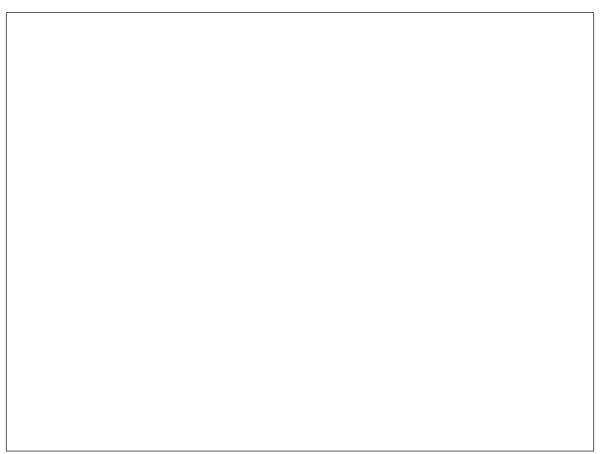
• Thinking about how to think about this collection and analysis challenge is the necessary first step in managing strategic organizational, resource, analytical, political, and operational responses.

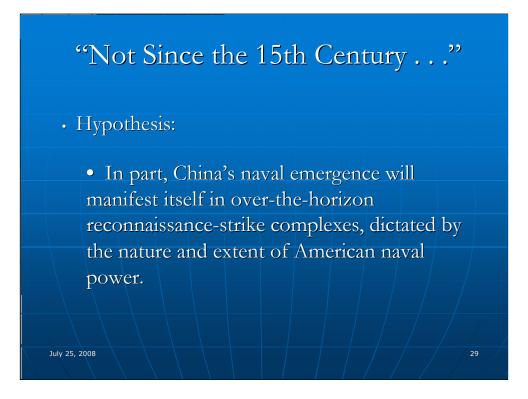


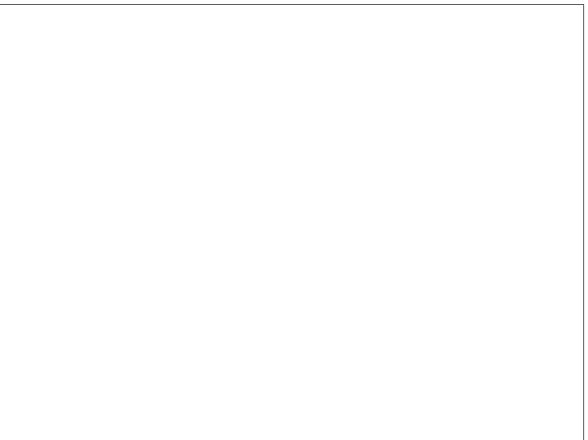


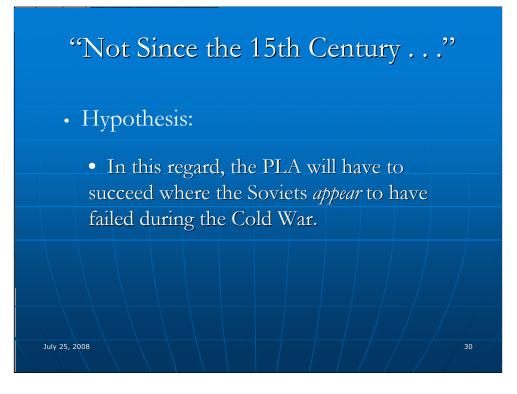
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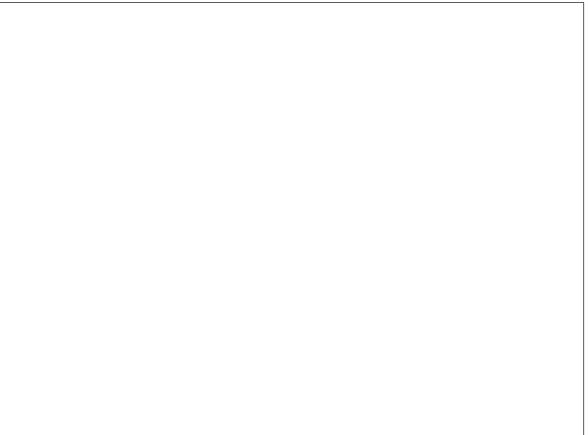


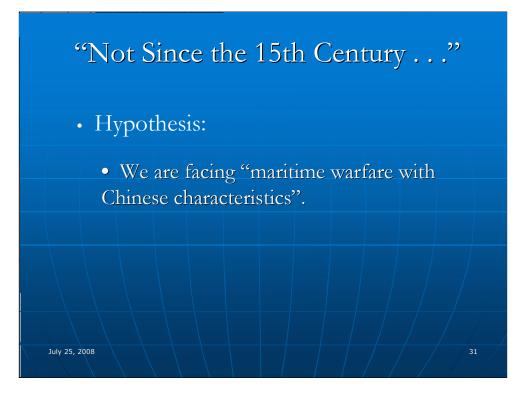


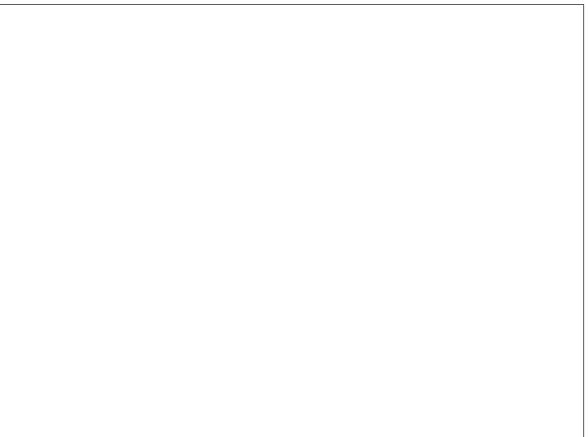


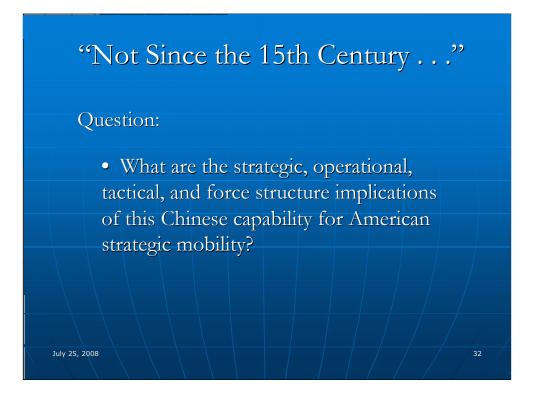


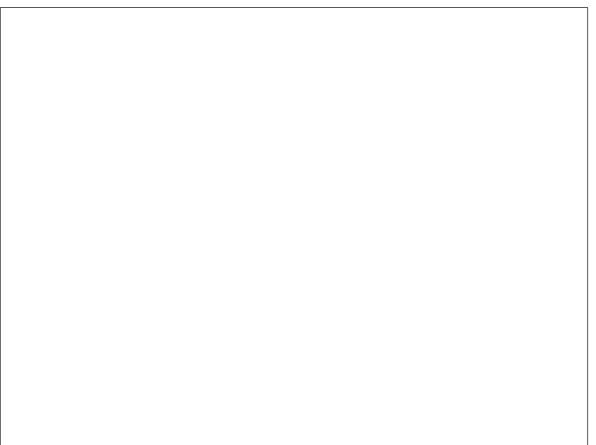


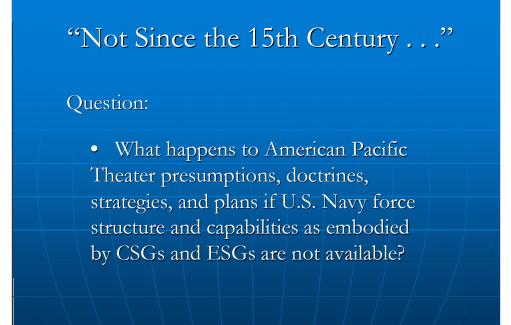














"Not Since the 15th Century . . ."

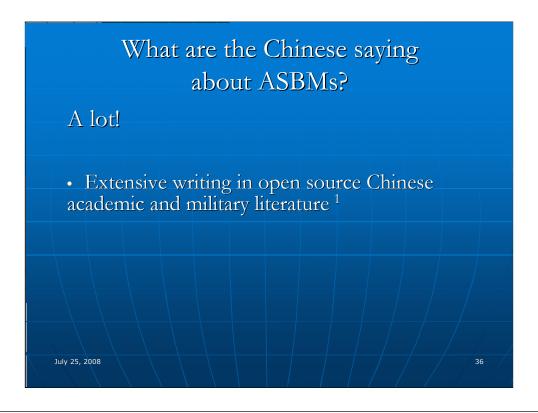
Stipulation:

• American commanders and strategists should consider the implications for American aerospace power of U.S. Navy combat power held at "arm's length" by the PLA.

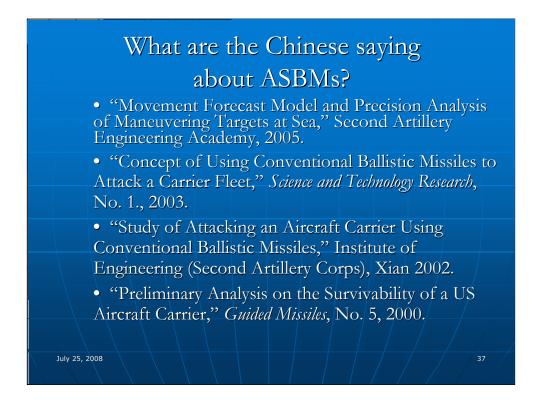


The Effect of Tactical Ballistic Missiles on the Maritime Strategy System of China, Wang Wei, <u>Shipborne</u> <u>Weapon</u> (August 2006), No. 84, pp. 12-15.

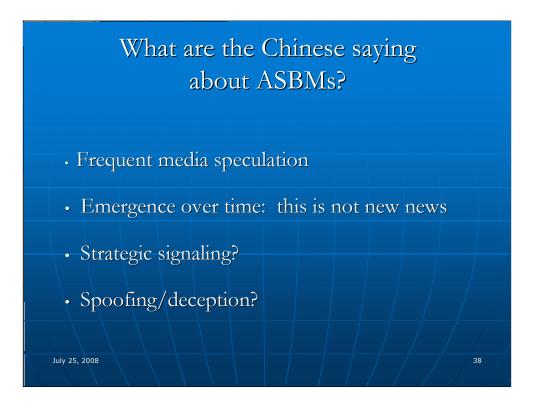
(Translated and provided by the China Maritime Studies Institute, U.S. Naval War College)

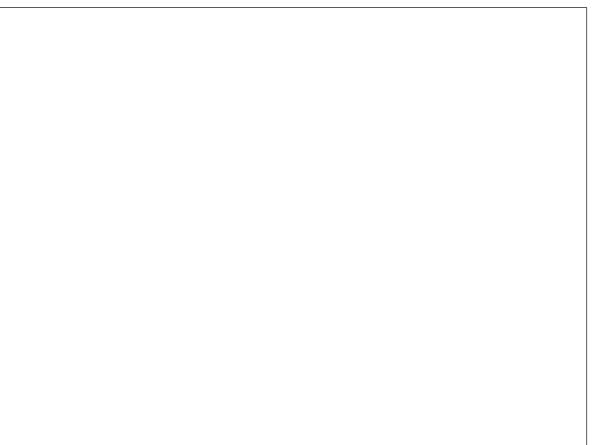


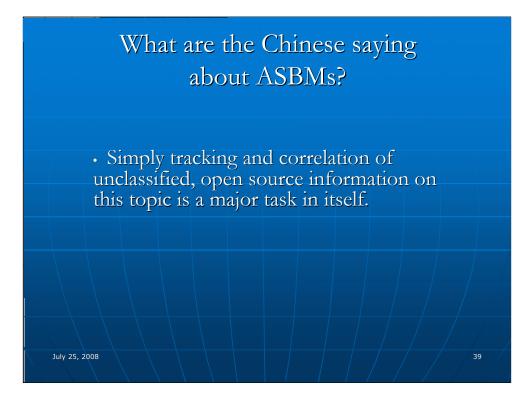
(See Jason E. Bruzdzinski, Military Operations Research in the People's Republic of China: The Influences of Culture, "Speculative Philosophy" and Quantitative Analysis on Chinese Military Assessments, June, 2007, The MITRE Corporation, McLean, Virginia)

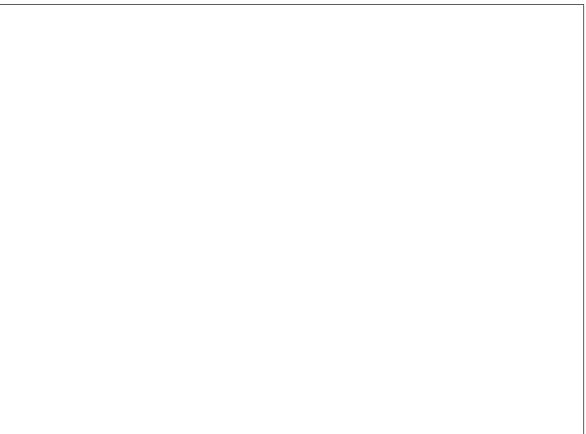


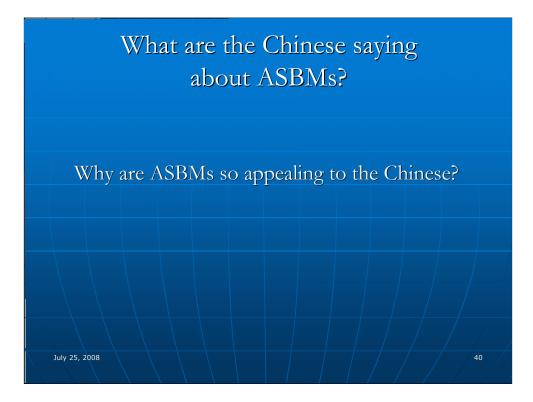
(See Jason E. Bruzdzinski, Military Operations Research in the People's Republic of China: The Influences of Culture, "Speculative Philosophy" and Quantitative Analysis on Chinese Military Assessments, June, 2007, The MITRE Corporation, McLean, Virginia)

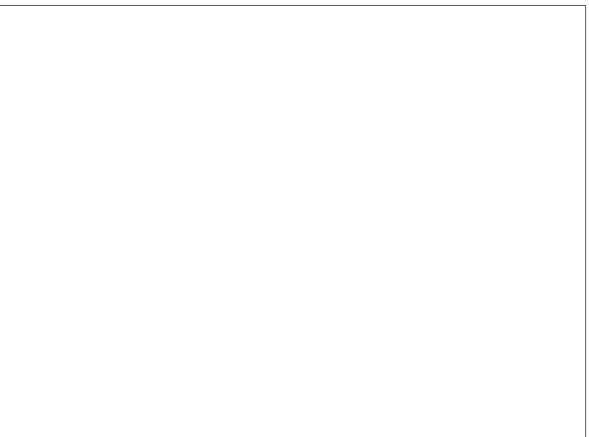


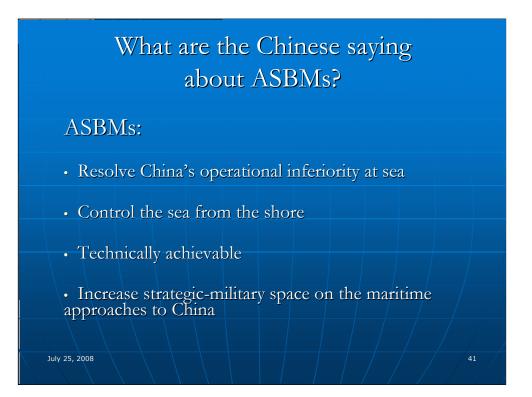






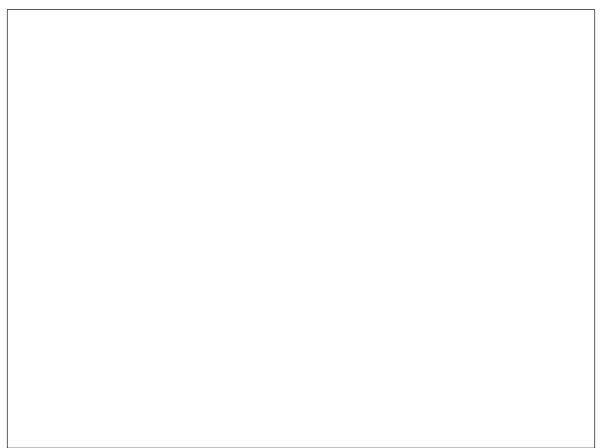


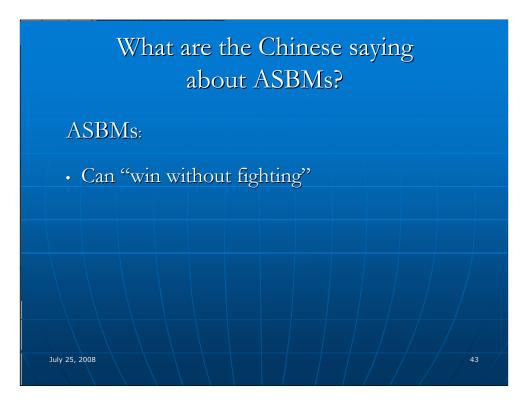


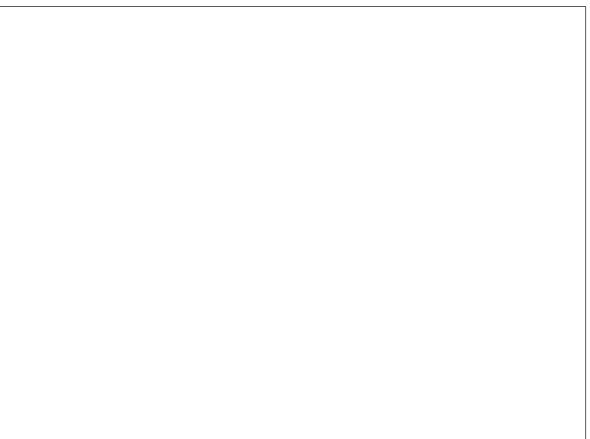


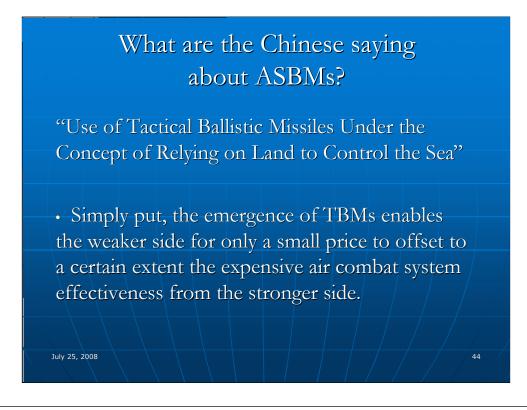












From a colleague who is a senior U.S. observer of China, a retired army colonel with two tours in the Beijing Embassy:

January 18, 2008

(Anti-ship ballistic missile attacks against U.S. aircraft carriers) is a topic I have spoken to many PLA officers about, including the current Chief of the General Staff Department when he was an MR commander. Remember that they first conceived this idea of using ballistic missiles for access denial and keeping an American fleet at a distance after the two carrier battle groups showed up during the missile exercises against Taiwan in 96. It was then that the concept was loudly voiced in the PLA. I was Army attaché in Beijing at the time. Since then, I've heard it lots of times from PLA officers when I was at the Embassy, the Army War College and The Heritage Foundation.

(Continued next page)

.... the surface vessel target creates a strong contrast against the background and is clearly much easier to recognize.

• Speed and maneuverability of the naval target is a relatively trivial matter, in relation to ASBM speeds.

Surface ships are highly integrated (i.e., therefore vulnerable to disruption and mission kill) physical
 July platforms.

From a colleague who is a senior U.S. observer of China, a retired army colonel with two tours in the Beijing Embassy:

January 17, 2008

Subject: Re: Attacking a carrier

My reading is that some in the PLA believe they have solved these problems, at least in the lab and in physics. Now my weakness, is I don't have the capability of verifying their math. But you should see the series from Nanjing Hangtian Dianzi Duikang that ran in June 2006 from the 8511 Institute of CASIC. It's a three part series translated by OCS. One of the articles, "PRC S&T: Techniques for Penetration of Aircraft Carrier Defense Formation," is pretty clear that THEY think they have these problems mastered. It is OSC CPP20060822476001. All three can be recovered from the OSC site if you have an account.

(Continued next page)

.... the key to ballistic missile strikes against targets at sea lies in the preparation of the maritime battle space.

• ... [This will require] the timely precision reconnaissance of the target's orientation, as well as the problem of transferring of this data. This is the prerequisite condition for attack against a moving target.

46

From a colleague who is a senior U.S. observer of China, a retired army colonel with two tours in the Beijing Embassy:

January 17, 2008

Subject: Re: Attacking a carrier (Continued)

See: PRC S&T: Techniques for Penetration of Aircraft Carrier Defense Formation

CPP20060822476001 Nanjing Hangtian Dianzi Duikang in Chinese 01 Jun 06 - 31 Jul 06 pp 4-8

[Article by Fang Youpei, Wang Liping, Zhao Shuang, Wang Gendi (No. 8511 Research Institute of CASIC, Nanjing 21007): "Study of Missile Technology for the Penetration of Aircraft Carrier Defense Formation"; author's information --Fang Youpei, (1951-), male, senior engineer, mainly working in the research of aerospace electronic countermeasure technology]

Abstract: Aircraft carriers in formation have various advanced weapons and strong countermeasure ability, so it is difficult to attack them. However, they have become conquerable along with the development of precision guided technologies and missile penetration technologies. Missile penetration technologies are discussed from the angle of information countermeasures.

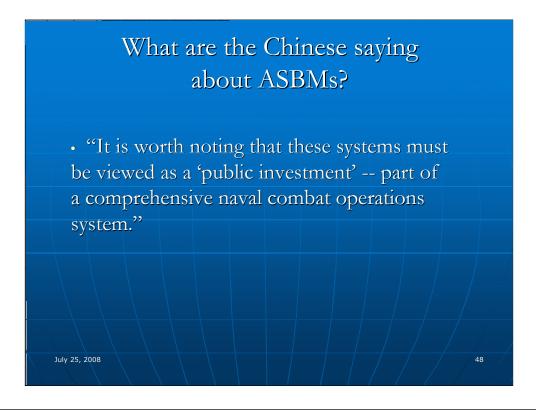
 Preparation of the sea battlefield will require: marine surveillance satellites, electronic reconnaissance satellites, imaging reconnaissance satellites, communication satellites and other space-based systems; airborne early warning aircraft and unmanned reconnaissance aircraft; airbase systems; shore based over-the-horizon radars; and underwater sonar arrays.

Conversely, a Taiwanese engineer's comments:

1. The re-entry vehicle, due to its high-speed and the air friction induced, will ionize the airflow at least in the nose cone area where the terminal guidance package is housed. The ionized air will disrupt most, if not all, electromagnetic communications from outside of the BM. This will make it extremely difficult, if not outright impossible, to render effective terminal guidance for practical anti-ship purposes.

2. For a large A/C such as Nimitz, its width is less than 45m. Even if we believe PLA's most accurate BM has the CEP of less than 50m and the US A/C doesn't move at all, aiming and hitting such a small target is next to impossible. Also, since the CEP is intrinsically (probability) oval-shaped, a battleship can move perpendicular to the azimuth angle from the launch site, thereby reducing the probable intersection area of the oval CEP and the elongated area of the ship.

(Continued next page)



Conversely, a Taiwanese engineer's comments: (Continued)

3. A Nimitz class (aircraft carrier) can sail up to 33 kt. Suppose a SRBM's re-entry time is 3 min, that means the ship has sailed at least 1.5 nm from the point in time when the BM reached its highest elevation in the projectile. Additionally, a battle ship will almost certainly take evasive maneuvers to escape the incoming. So unless PLA's BM is nuclear-tipped, such attack will most likely be futile.

4. About 5–6 years ago, PLA published an article claiming to be able to maneuver the re-entry vehicles in a downward spiral projectile to elude anti-missiles such as PAC-2/3 or SM-2/3. While technically feasible, such maneuver will almost certainly defeat the purpose of precision guidance because the rapid spiral decent will make its impact point very hard to predict from the onboard computer. This is especially true if the BM is not equipped with a highly accurate altimeter which may not be functioning due to the ionization.

• ... for China, there will be no so-called technological "bottleneck" when it comes to controlled, motor-driven [course correction of] ballistic missiles in outer space.



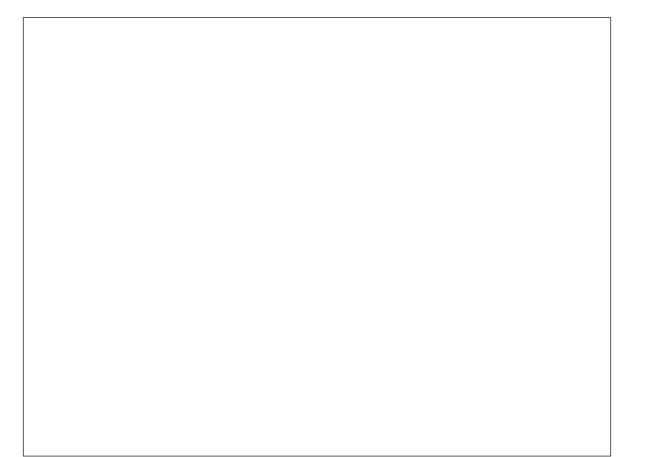
• ... (missile) control during the reentry stage and other kinds of guidance technology during the final stage ... were used for the "Pershing" missiles developed during the Cold War period. Currently, TBMs in the service of (the PLA) also use this kind of technology. Thus, it can be assumed that the technical problems of the missile itself are not insurmountable.

50

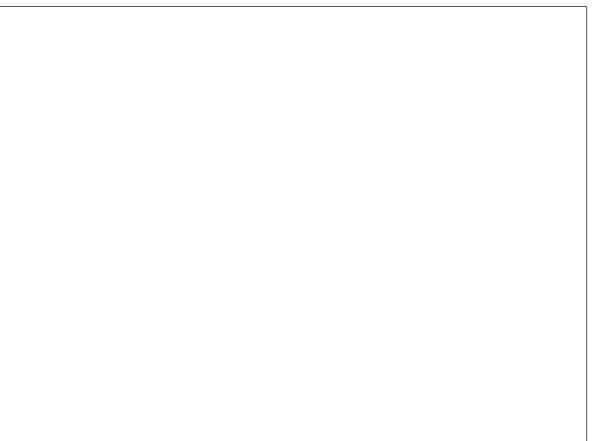


Implications for U.S. PACOM

- Held at long ranges
- Force structure implications
 - Surface unit vulnerability
 - Short-range aircraft
 - Optimized for offense
 - USMC over the horizon amphibious assaults and Ship to Objective Maneuver_____



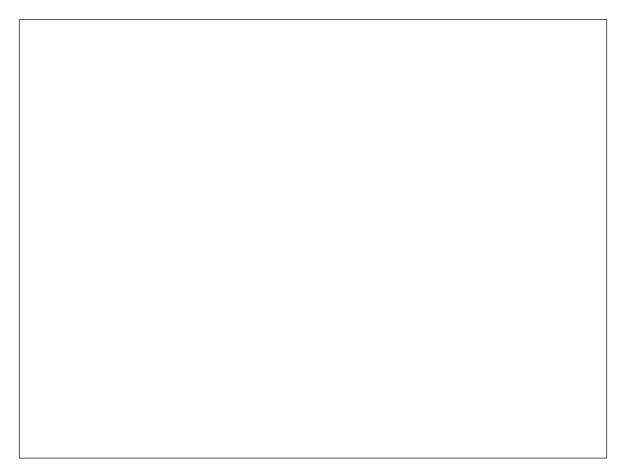




Implications for U.S. PACOM

Limited shipboard ABM missile magazine capability

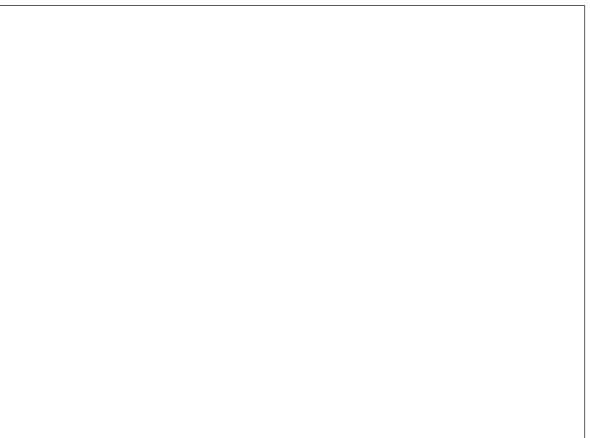
• Imagine a "1942 campaign", against an asymmetric peer competitor, having to peel back networks and systems to regain strategic mobility.

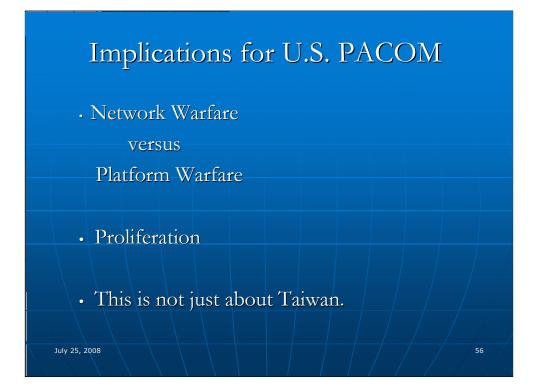


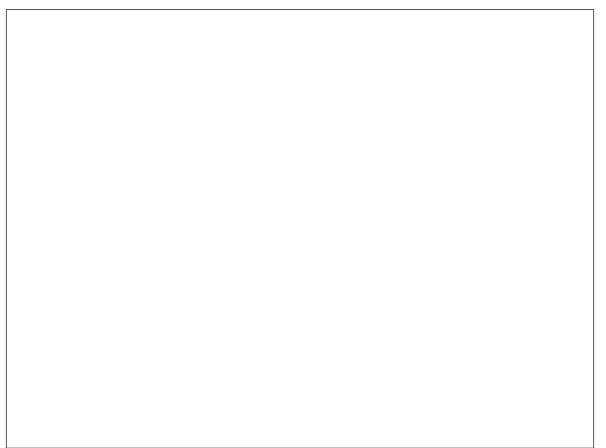














http://bbs.cjdby.net

China's Maritime Security Strategy and its Development Rationales

Dan Hartnett July 24, 2008



"As for me, all I know is that I know nothing."

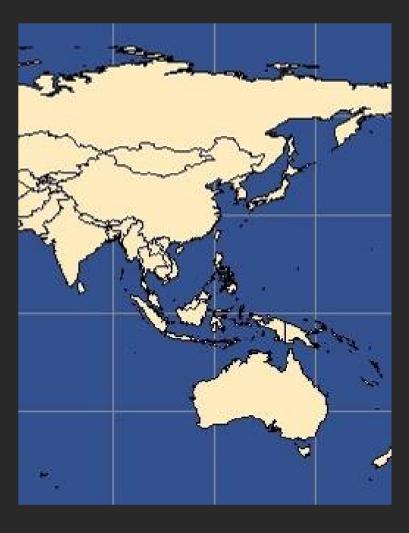
-Socrates

- Details of China's naval strategy are not frequently discussed in public
 - Most data is likely classified
- Data used here is clearly not all-inclusive
- Not all sources are equal in value





Research Background
 II. The "Seven Themes"
 III. "What's China Doing?"
 IV. Two Final thoughts





Research Background and Methodology

- Starting point: China currently does not have a maritime security strategy
 - At least not one that is officially and openly published!
- Research questions:
 - Why does China feel the need to strengthen its maritime security and develop the People's Liberation Army Navy (PLAN)?
 - How are they addressing these issues?

Research approach:

- Reviewed c. 75 Chinese open source articles since the early 1990s on China's maritime security
- Vetted for authoritativeness of sources and authors
- Came up with seven "themes" in arguments for improving maritime security



I. Research Background
The "Seven Themes"
III. "What's China Doing?"
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The "Seven Themes"*

Seven themes commonly cited for why China needs to develop its maritime security strategy:**

- 1. Territorial Integrity
- 2. Regional Resource Interests
- 3. Sea Lanes of Communication (SLOC)
- 4. Traditional Security Threats
- 5. Non-traditional Security Threats
- 6. Recognition that the PLAN "Can't go it Alone"
- 7. Nationalism/Prestige

*Presenter's categories, not the Chinese authors'.

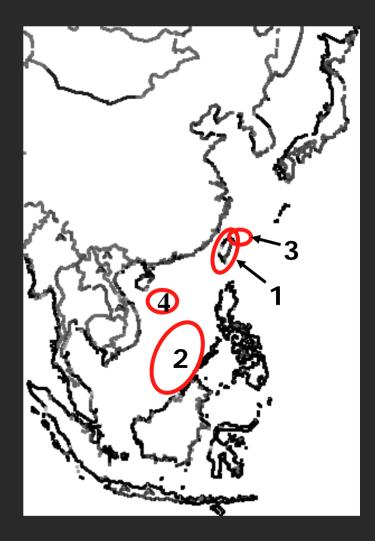
**Themes are in no particular order.



Theme 1: Territorial Integrity

- 1. Taiwan
 - Primary focus of this category
- 2. Spratly Islands
- 3. Senkaku/Diaoyu Islands
- 4. Paracel Islands

The last three are complicated by nearby martime resource interests

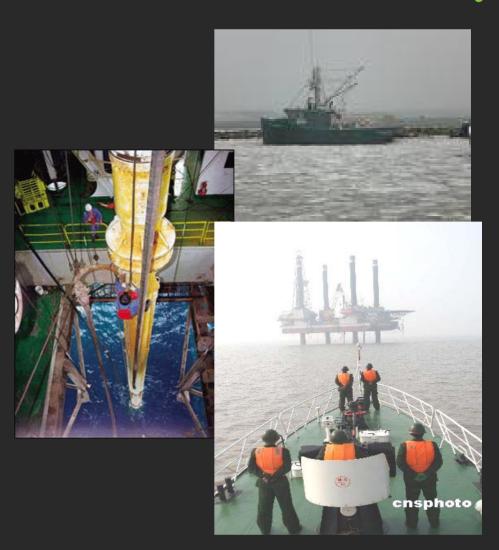




Theme 2: Regional Resource Interests

- Oil
- Natural gas
- Minerals
- Fishing

Exacerbated by nearby territorial disputes





Theme 3: Sea Lanes of Communication (SLOC)

- SLOC critical to China's economy
 - Maritime shipping
 - Import of natural resources
- Hu Jintao's "Malacca Dilemma"
- Protection of SLOC would likely fall to PLAN, but do they have the capabilities?



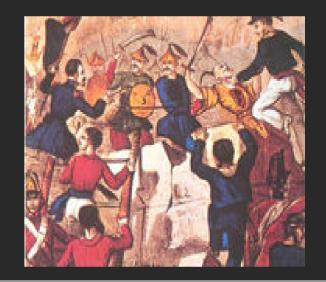
Potential Choke Points

 And can (or would) anyone be able to blockade a SLOC?



Theme 4: Traditional Security Threats

- Traditional security threats still cited as possibility
 - But a *distant* possibility
- Exacerbated by economic importance of China's eastern seaboard "
- Authors argue for an indepth defense



"China's economic center of gravity is increasingly concentrated in the coastal areas. If these areas are not secure, the security of China's economy is out of the question." RADM Yao Wenhuai Deputy Dir, Pol. Dept., PLAN 2007



Theme 5: Non-Traditional Security Threats

- Recent writings have also focused on non-traditional security threats in the maritime environment
 - Disasters
 - Piracy
 - Terrorism
 - Transnational crime
 - WMD proliferation
- Mirrors Chinese thinking on overall security environment

"Non-traditional security threats are growing more prominent" -2006 Defense White Paper



"China's maritime security situation ... not only faces traditioanl threats, but also faces the non-traditional security threats of terrorism, piracy, and transnational crime." ADMS Wu Shengli and Hu Yanlin PLAN Commander and Political Commissar

11

Theme 6. Recognition that the PLAN "Can't go it Alone"

- Frequent mentioning that PLAN cannot do it all
- Authors point out the need for using different players and means:
 - Civil maritime authorities
 - Diplomatic
 - Economic
 - Legal
 - Scientific & Technological

"Use diplomatic, economic, legal, military, and scientific means to defend our maritime rights and interests."

Tang Fuquan, Ye Xinrong, and Wang Daowei Dalian Vessel Academy 2006

"...Compared with the extension of China's national interests, the means to protect them are too weak."

RADM Yang Yi

Dir. of Institute for Strat. Studies, NDU 2006



Theme 7: Nationalism/Prestige

- "Its what great powers do!"
 - References to British Navy
- China is an important international player
 - Politically
 - Economically
 - Culturally
- Yet PLAN is arguably less capable in some facets than other regional navies:
 - Japan
 - India?
 - Even Thailand has an aircraft carrier



"China is a great maritime nation" Hu Jintao 2006





I. Research Background
II. The "Seven Themes"
> "What's China Doing?"
IV. Two Final Observations





So...

...what is Beijing doing about these issues?

- 1. Modernizing the PLAN
- 2. Increasing the PLAN's functions
- 3. Expanding the PLAN's operational range
- 4. Making the PLAN more active in the region
- 5. Developing China's non-military maritime capabilities



1. Modernizing the PLAN

• New vessels

- Submarines
- Surface combatants
- Amphibious
- New aircraft
 - Land-based aircraft
- New weapons systems:
 - Theater ballistic missiles
 - Land-attack cruise missiles
 - Anti-ship cruise missiles
 - Surface-to-air missiles

Defense White Papers on the PLAN:

- "The PLAN is developing new combat ships, special-purpose aircraft, and relevant equipment" (2004)
- "The PLAN increasing its high-tech means and long-range precision strike capabilities" (2004)
- "The PLAN is emphasizing developing maritime information systems, and new-generation weapons and equipment." (2006)



2. Increasing the PLAN's Functions

• Capabilities:

- "The PLAN increasing its high-tech means and long-range precision strike capabilities" (2004 Defense White Paper)
- "The PLAN is strengthening its overall capabilities for operations in coastal waters, joint operations, and integrated maritime support." (2006 Defense White Paper)

Roles and missions:

- "Non-combat operations are already an important component of PLAN military operations."
 - Science of Naval Military Training (2006)



PLAN non-combat operations:

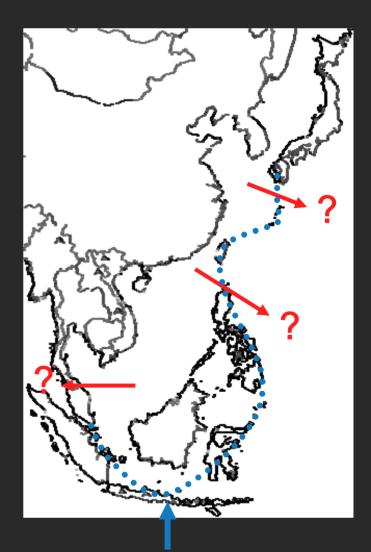
- Disaster relief and law enforcement
- Demonstrations of military deterrence
- International security cooperation
- Military diplomacy
- Maritime search and rescue



3. Expanding the PLAN's Operational Range

- PLAN seeking to expand its operational range:
 - Hu Jintao calls for PLA to move beyond just territorial waters (2004)
 - 2004 and 2006 Defense White
 Papers emphasized expanding the navy's strategic depth
 - Calls for moving beyond first island chain to "distant ocean defense" (*yuanhai fangyu*)

No further details unfortunately



First island chain



4. PLAN Becoming More Active in the Region

- "Showing the flag"
 - Pakistan
 - India
 - Thailand
 - Philippines
 - Indonesia (1st in 12 years)
 - Japan (1st ever for PLAN)
- Regional military exercises
 - Pakistan
 - India
 - Thailand
- PLAN also involved in extraregional activities



PLA Navy port call, Tokyo Nov 2007



Aman '07, Pakistan Mar 2007



5. Beijing Developing its Maritime Non-military Wherewithal

• Economic

- State Council's "National Maritime Economy Development Plan" (2003)
- State Development and Reform Commission's "Plan for National Economic and Social Development" (2006)
- State Council's "Outline of the National Maritime Enterprise Development Plan" (2008)

Scientific & technological

- Oceanographic research ("908 Project")
- State Oceanic Administration's "Outline of the National Maritime S & T Development Plan for the 11th FYP" (2006)



5. Maritime Non-military Wherewithal (Cont'd)

• Civil maritime authorities

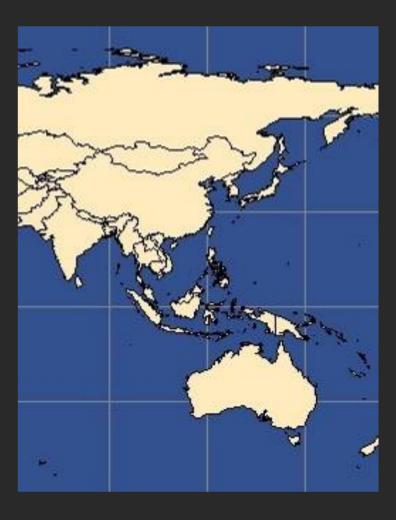
- Maritime Safety Administration
- State Oceanographic Administration
- People's Armed Police
- Ministry of Agriculture

Diplomatic

- Attempts to diffuse and resolve maritime disputes peacefully
 - Maritime territorial disputes with Japan and Vietnam
- International cooperation
 - ASEAN + 3
 - ASEAN Regional Forum (ARF)
 - "East Asian Seas Congress 2006" (China)
 - "Shanghai International Maritime Forum," 2007 (China)



I. Research Background
II. The "Seven Themes"
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> Two Final Observations





1. "It's the Economy, Stupid!"

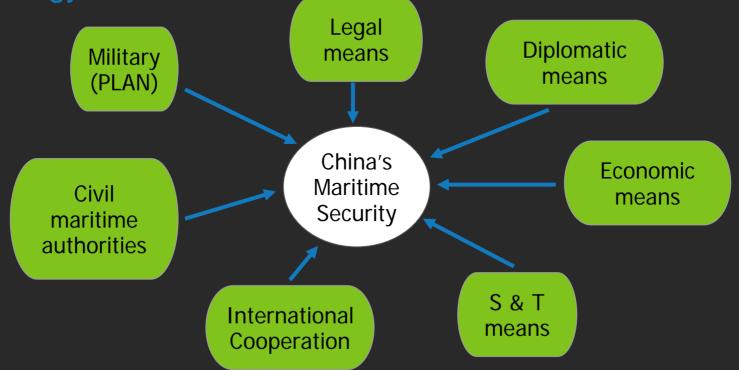
- Beijing's maritime security strategy is heavily economic driven
 - Regional resource interests
 - Extra-regional economic interests (via SLOC)
 - Economic importance of eastern seaboard
 - (Nationalism)

 Economic focus of maritime security likely to expand as does China's global economic activity



2. More than Just Military Security

- Likely Beijing's maritime security strategy will not solely be military-focused
 - Although PLAN will probably be main component
- Instead, it will be a comprehensive maritime security strategy:



Questions?





Asian perspectives of China's Role A view from Japan

Yoichi Kato The Asahi Shimbun July 24, 208

(1) Strategic Objectives of Chinese Military

Analysis of GOJ/MODJ---4 objectives

- (a) To prevent the operations of enemy as far from its own territory as possible in order to defend the territory and the territorial waters
- (b) to acquire the military capability to deter and prevent the independence of Taiwan
- (c) to obtain, maintain and protect the maritime interests
- (d) to protect the SLOC for globalised economic activities

(2) Recent Developments of Sino-Japanese relations

(August 07) China's Defense Minister visit Japan

(September 07) Fukuda Cabinet formed

(December 07) Fukuda's first visit to China

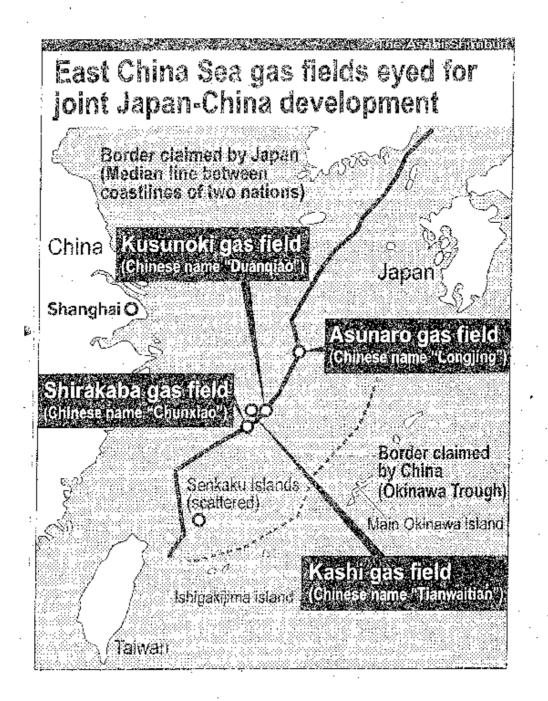
(May 08) China accepts Japan's disaster relief team for Sichuan earthquake

(May 08) Fukuda-Hu talks; Agreement to "not to become the threat to the other party"

(June 24, 08) JMSDF Ship's first visit to China

(November 28, 2007) China's destroyer to visit Tokyo

(June 18, 08) Agreement to joint development of the two gas fields in disputed waters of East China Sea



(3) Analysis

- China's intention to improve the relations with Japan is clear
- Set aside history issue/territory issue
 - --shut down the critical websites
- ➤"Process of change for tolerance"
- Transmit the image of "cooperative partner" "benign leader"
- Road to "Major Power"
 Major power of Peace
 Major power of Civilization
 Major power to be welcomed by the region



Could a Blockade Cut Off China's Oil?

July 24, 2008

William S. Murray U.S. Naval War College China Maritime Studies Institute United States Naval War College . Newport . Rhode Island

Note: The views offered in this briefing are those of the author and do not represent the official assessments or policies of the U.S. Navy or any other element of the U.S. Government.

Framework

 A blockade would be used only during war with the PRC
 A blockade might appear attractive as an easily reversible coercive tool that limited escalation

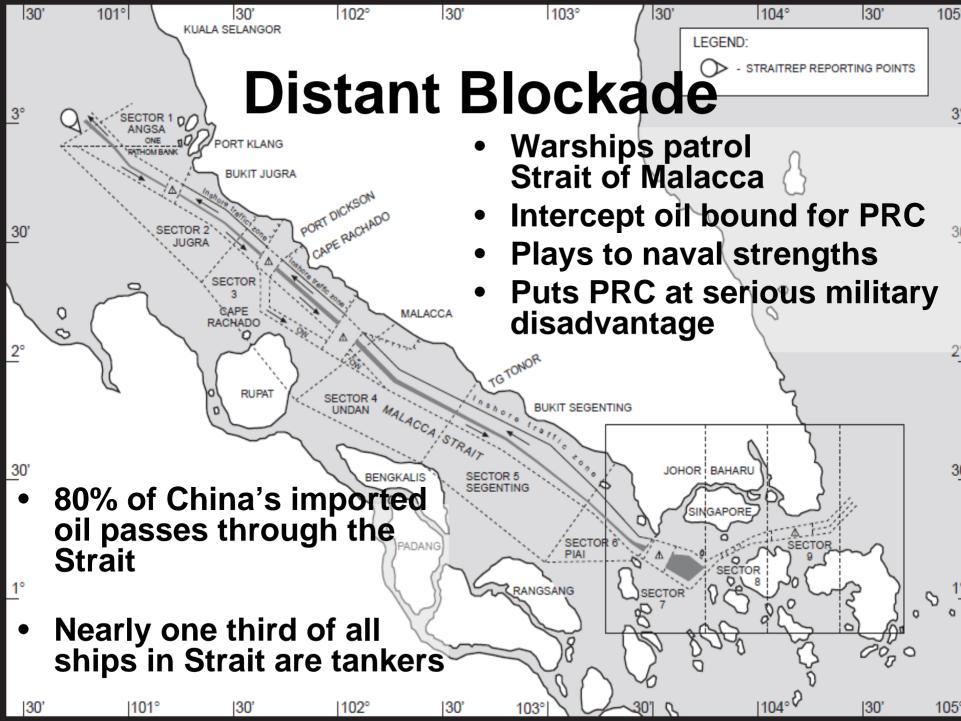
 This analysis focuses on practical and physical aspects of a potential blockade, not the legalities

Scenarios

Supply side blockade
Distant blockade
Close blockade
Blockade by convoy
Precision attacks on oil infrastructure

Supply Side Blockade

 Organize an embargo of oil to China \succ Oil market trades a fungible commodity, making "targeted" effect difficult to achieve Effects would be like the 1973 Oil Embargo Oil, though more expensive, reached embargoed states through indirect routes Likely to fail Exporting nations' cooperation debatable



Beijing's "Malacca Dilemma"

 "可以说, 谁控制了马立甲海峡, 就等 于谁把手放在了中国的战略石油通道上, 谁就能随时威胁中国的能源安全。"

"-One can say that whoever controls the Malacca Strait, which is China's strategic oil supply channel, has the ability to threaten China's energy security at will." (XDJC 12-2004)

PLAAF / PLANAF

Although the PRC's long range strike 1. 共大地共大人 capabilities are improving TILLIAS & >Many older aircraft in inventory 12*111 > Weak aerial refueling >Little evidence to suggest China is pursuing the capability to conduct long range coordinated strikes

Diesel Submarines?

- PRC fleet is large, modernizing, and has capable weapons, however...
- Combat zone is far from the PRC
- >12 to 25 day transit
- Malacca Strait too shallow for submarines
 Passage, operations, and weapons are all badly constrained

Inexperienced in distant operations

Nuclear Submarines?

中国海军潜艇

A 17. 124

Noisy and limited in numbers
 >Unlikely to survive against a capable enemy

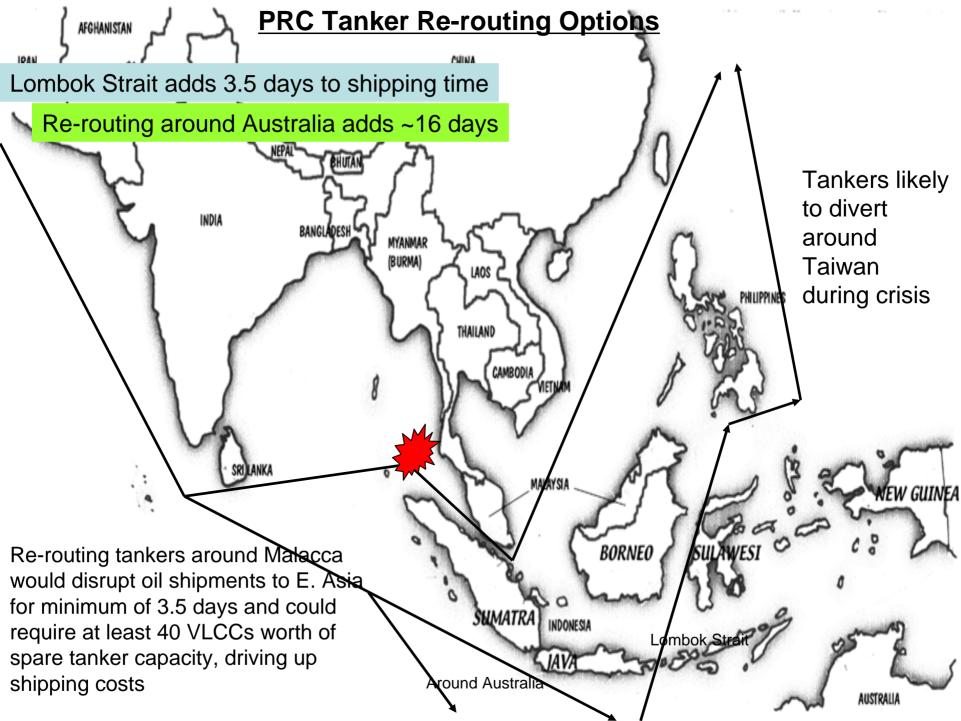
《现代舰船》2007-09A期 鼎盛王朝 我们爱科学 扫描

PLAN Surface Ships?

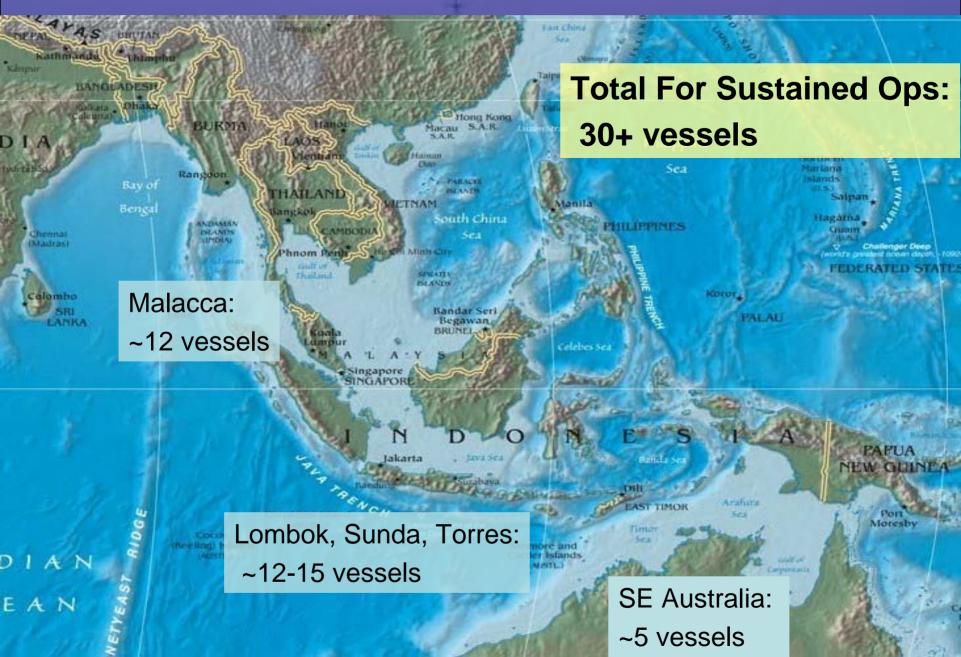
- Limited open ocean experience
- No bases or support ships to support distant operations
- Limited Anti Submarine Warfare ability a critical vulnerability

Possible PRC Responses to a Distant Blockade

- Provide economic incentives to runners
 Fake bills of lading
 - Trans-shipment from neighboring countries
 - Resell oil cargo to China after passing chokepoints
 - Cargo parceling
- Exert diplomatic and economic pressure
- Implement austerity measures
- Horizontal escalation against civil and military targets



Force Estimate

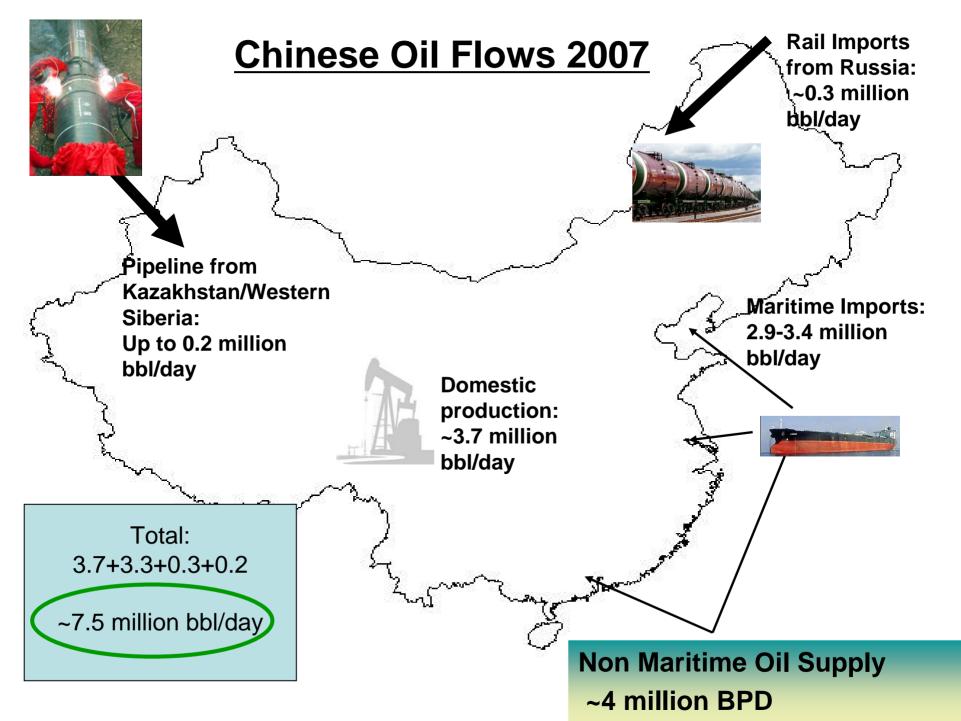


Identify tankers bound for China? Strait of Malacca Traffic - 2003 >172 ships per day >52 eastbound tankers per day (1 in 5 VLCC) >11,000,000 bpd through Strait Approximately 2.8 million bpd going to China Up to 13 tankers going to China per day (avg) - Actual Chinese oil purchases are "lumpy" because buyers are price sensitive

Sources: Marine Department of Malaysia Malacca VTS statistics, & Mokhzani Zubir, The Strategic Value of the Strait of Malacca, Centre for Maritime Security and Diplomacy, Maritime Institute of Malaysia

Challenges for Blockader

- Stop, board, and inspect
- Flag State?
- Non-cooperative vessels?
- Disposition of seized vessels, cargoes & crews?
 Prize crews?



Distant Blockade Results

Tactical success possible, strategic failure a strong possibility
Duration of effort unknown
High diplomatic, economic, and opportunity costs



Close Blockade



- 21. Qinhuangdao, Hebei 3
- 22. Rizhao, Shandong
- 23. Sanya, Hainan
- 24. Shanghai
- 25. Shantou, Guangdong
- 26. Shenzhen, GOuangdong
- 27. Taizhou, Zhejiang
- 28. Tianjin
- 29. Tongling, Anhui
- 30. Wanzhou, Chongqing

- 31. Wuhu, Anhui
- 32. Xiamen, Fujian
- 33. Yangzhou, Jiangsu
- 34. Yantai, Shandong
- 35. Yichang, Hubei
- 36. Yingkou, Liaoning
- 37. Zhanjiang, Guangdong
- 38. Zhenjiang, Jiangsu
- 39. Zhicheng, Hubei
- 40. Zhongshan, Guangdong

Possible PRC Responses to a Close Blockade

Naval war of attrition

Escalatory pressures

Increased overland delivery
Substitution, efficiency, & less economic resources

Blockade by Convoy

 All Asian-bound tankers escorted by warships to approved destinations
 Five VLCCs per day on 22 day trips
 22 convoys just for VLCCs

 Other tankers, other ports require further escorts
 Would require an enormous navy and would disrupt energy distribution to many

Energy Denial

Octoor, 'nckade an refineries, pipelines, ese Precision of the solution of t Preci to mimic, due to proliferation of prev **munitions**

Conclusion

China is not fundamentally vulnerable to an energy blockade
 The international energy market and shippers' profit motive provide China energy security
 Few, if any navies could threaten China's oil imports

 China does not appear to require a blue water PLAN to protect against an energy blockade
 Opens the door for cooperation

Questions?

China's Approach to Space and Counterspace

Kevin Pollpeter China Program Manager, DGI 25 July 2008





Center for Intelligence Research and Analysis

Advancing U.S. Intelligence Through Innovative Research, Analysis, and Public Outreach

Overview

- Confrontation in space is inevitable
- Space control will be the deciding factor in future conflicts
- Anti-access measures involve deterrence and warfighting
- Deterrence is aimed at convincing adversaries that China can inflict unacceptable losses
- Warfighting involves counterspace and spaceenabled operations
- China is using space to become a great power, providing opportunities for diplomatic and commercial access

Definitions of Space War

- Military offensive and defensive operations in outer space
- Attacks against targets in air, ground, sea, or space from space
- Attacks against targets in space from air, ground, sea, or space
- Attacks against ground segments
- Space weapons can include ISR, communications, meteorological satellites

Deterrence

- Aim of deterrence is to make opponent submit to China's will
- Convince adversary that he will suffer unacceptable losses
- Must be a viable space power
 - Strong overall space program, including civilian space program
 - Includes force enhancement, space control, and force application capabilities
 - Strong defensive capabilities

Deterrence Aspects

- ISR capabilities
 - Determine enemy intentions and deployments before a conflict begins, e.g., Cuban Missile Crisis
- Strengthening overall military power
 - Helps determine enemy posture
 - Facilitates jointness and interconnectivity
 - Enables precision attacks
- Counterspace
 - Ability to take out adversary's satellites may deter adversary from conducting counterspace operations

Deterrence Methods

- ASAT testing
 - If successful, can prove ability to attack adversary

- If unsuccessful, can prove intentions
- Space wargames
 Schriever wargames
- Use space power
 - -U.S. operations since Gulf War

Warfighting: Concept of Operations

- Quick war, quick resolution (速战速决)
 - Modern wars are decided by one campaign
 - Must gain initiative at outset of conflict
- Active defense strategy (积极防御战略)
 Politically defensive, operationally offensive
- Gain mastery by striking first (先发制人)
 - Preemption
 - Surprise attacks
 - Natural aggressiveness

Warfighting: Striking An Adversary's Vital Targets

- Targets that could have a direct impact on the overall situation of the campaign or produce an overall effect
- Attacking vital targets is especially recommended in cases where the PLA faces a "powerful enemy equipped with high technology weapons and equipment" rather than conduct wars of annihilation

Warfighting: Information Warfare

- Vital targets are those involved in collecting and processing information
- Information superiority is now seen as the main determiner of success on battlefield
- Information control does not have to be achieved permanently across all battlefields
 - Can be achieved locally
 - For short periods of time
- Space warfare is subset of information warfare

Why Space Is Important

- Whoever controls space will control the Earth
- Space is the new high ground
- Space is the most important component of modern militaries' information systems
 - Collects and transmits information
 - U.S. uses spaced-based ISR for 70-80% of its intelligence
 - U.S. uses satellites for 80% of its communications
 - U.S. space-based ISR provides exquisite intelligence

Why Space Is Important

- Without space, conducting modern war is not possible
- Evolution of war from ground to sea to air to space as dominant domain
- Space power will develop as air power has
- Space war is inevitable
- Establishing control of space first priority of any campaign

Warfighting: First to Fight

- If China believes that space is *the* vital segment of information systems, and if they believe that whoever controls space controls the earth, then achieving space control is necessary to win war
- If China emphasizes striking first to seize the initiative, then China could strike first in space to set the conditions to control the battlefield

Warfighting: Counterspace Missions

- Space is viewed as a great U.S. strength and vulnerability
- Attacks against components of U.S. space system can debilitate entire information system
- Slow down U.S. OODA loop
- Only need to create window of opportunity

Warfighting: Types of Attacks

- Combination of hard and soft attacks recommended
 - Hard
 - Permanent
 - Can create debris
 - Soft
 - Temporary
 - Do not create debris
 - Useful against third-party satellites

Warfighting: Targeting

 Chinese writings on information warfare stress attacking ISR assets first

• Enables stratagems

Warfighting: Force Enhancement

- Chinese concept is influenced by U.S. operations and writings on NCW
- China seeks to speed up its OODA loop
 - Transparent battlefield
 - Ability to attack quickly
- Improves efficiency of attacks against Taiwan
- Pushes U.S. carriers farther out
 - ISR and comms needed for ASCM, ballistic missile, submarine attacks

Space: Access

- China's space program is increasing its political, diplomatic, and economic power
- China is taking a leading position in regional space cooperation
- China is striving to become a major commercial space power
- Space successes give it prestige to achieve great power status

Conclusions

- CHINA IS NOT IRAQ!!
- Space war fits neatly into PLA concept of operations
- China wants to use space and deny its use to others
- Access Implications
 - Deterrence
 - Force enabler
 - Counterspace
- China's attractiveness as a rising space power provides diplomatic and commercial activities