FONDATION pour la RECHERCHE STRATÉGIQUE

Emerging US warfighting concept in Western Pacific

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29/09/2020

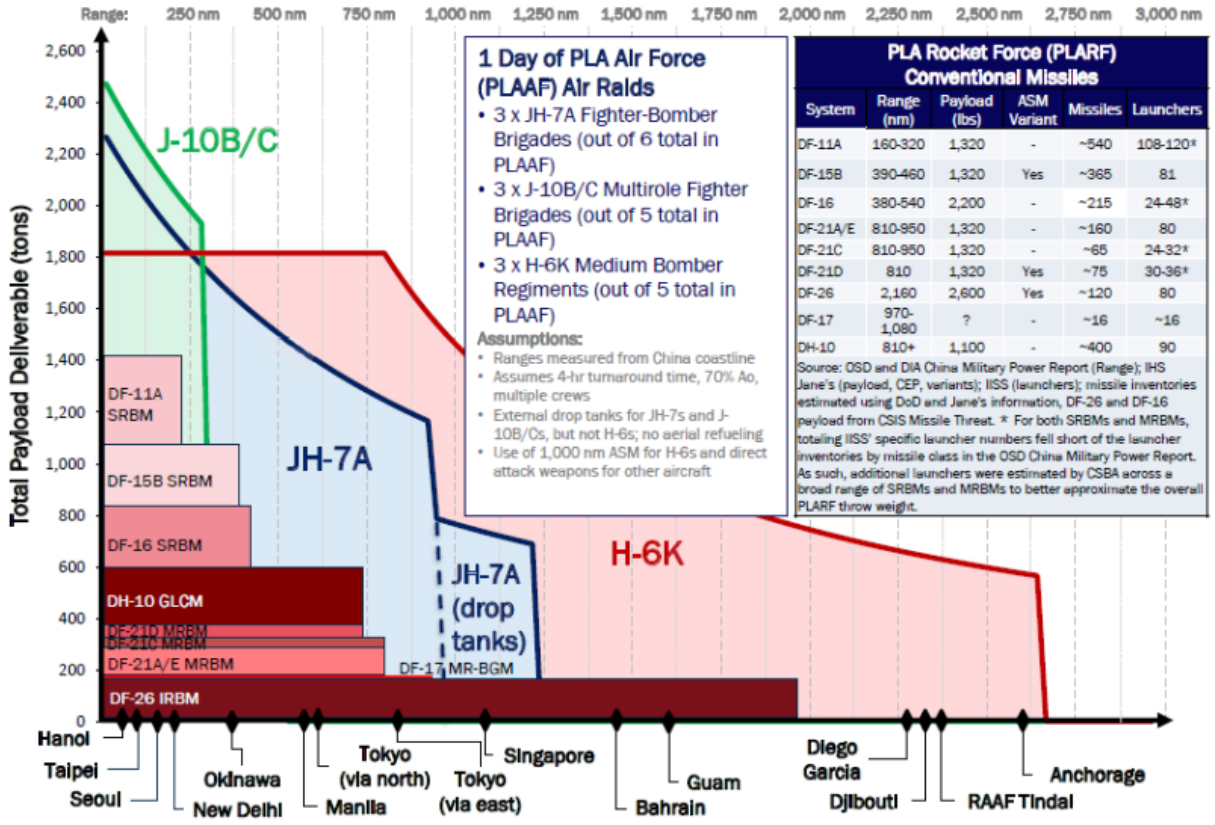
Agenda

- The perceived erosion of US superiority
- A range of new concepts, force design and capabilities development initiatives to « regain the advantage »
- The (alleged) emerging warfighting concept
- Some questions and debates

The perceived erosion of US superiority

Bryan Clark, Timothy A. Walton, *Taking Back The Seas : Transforming The U.S. Surface Fleet for Decision-centric Warfare*, CSBA, 2019, p.16

FIGURE 8: PLA CRUISE AND BALLISTIC MISSILE THROW WEIGHT, INCLUDING THE POTENTIAL ASM PAYLOAD OF SOME PLAAF AIRCRAFT



1 Day of PLA Air Force (PLAAF) Air Raids

- 3 x JH-7A Fighter-Bomber Brigades (out of 6 total in PLAAF)
- 3 x J-10B/C Multirole Fighter Brigades (out of 5 total in PLAAF)
- 3 x H-6K Medium Bomber Regiments (out of 5 total in PLAAF)

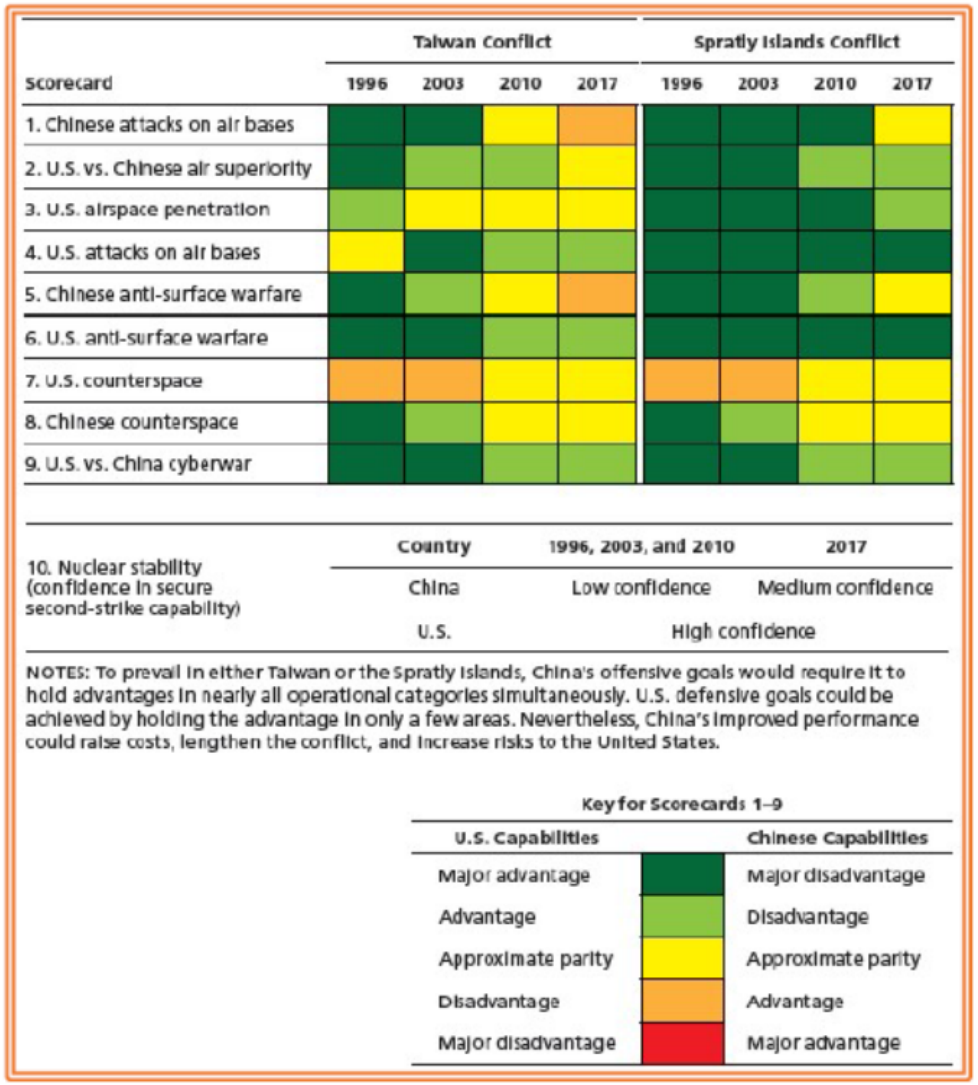
Assumptions:

- Ranges measured from China coastline
- Assumes 4-hr turnaround time, 70% Ao, multiple crews
- External drop tanks for JH-7s and J-10B/Cs, but not H-6s; no aerial refueling
- Use of 1,000 nm ASM for H-6s and direct attack weapons for other aircraft

PLA Rocket Force (PLARF) Conventional Missiles

System	Range (nm)	Payload (lbs)	ASM Variant	Missiles	Launchers
DF-11A	160-320	1,320	-	~540	108-120*
DF-15B	390-460	1,320	Yes	~365	81
DF-16	380-540	2,200	-	~215	24-48*
DF-21A/E	810-950	1,320	-	~160	80
DF-21C	810-950	1,320	-	~65	24-32*
DF-21D	810	1,320	Yes	~75	30-36*
DF-26	2,160	2,600	Yes	~120	80
DF-17	970-1,080	?	-	~16	~16
DH-10	810+	1,100	-	~400	90

Source: OSD and DIA China Military Power Report (Range); IHS Jane's (payload, CEP, variants); IISS (launchers); missile inventories estimated using DoD and Jane's information, DF-26 and DF-16 payload from CSIS Missile Threat. * For both SRBMs and MRBMs, totaling IISS' specific launcher numbers fell short of the launcher inventories by missile class in the OSD China Military Power Report. As such, additional launchers were estimated by CSBA across a broad range of SRBMs and MRBMs to better approximate the overall PLARF throw weight.



Scorecard	Taiwan Conflict 1996	2003	2010	2017	Spratly Islands Conflict 1996	2003	2010	2017
1. Chinese attacks on air bases								
2. U.S. vs. Chinese air superiority								
3. U.S. airspace penetration								
4. U.S. attacks on air bases								
5. Chinese anti-surface warfare								
6. U.S. anti-surface warfare								
7. U.S. counterspace								
8. Chinese counterspace								
9. U.S. vs. China cyberwar								

10. Nuclear stability (confidence in secure second-strike capability)	Country	1996, 2003, and 2010	2017
	China	Low confidence	Medium confidence
	U.S.	High confidence	

NOTES: To prevail in either Taiwan or the Spratly Islands, China's offensive goals would require it to hold advantages in nearly all operational categories simultaneously. U.S. defensive goals could be achieved by holding the advantage in only a few areas. Nevertheless, China's improved performance could raise costs, lengthen the conflict, and increase risks to the United States.

Key for Scorecards 1–9

U.S. Capabilities		Chinese Capabilities
Major advantage		Major disadvantage
Advantage		Disadvantage
Approximate parity		Approximate parity
Disadvantage		Advantage
Major disadvantage		Major advantage

Eric Heginbotham (dir), The U.S.-China military scorecard : forces, geography, and the evolving balance of power, 1996-2017, Rand Co, 2015, p. xxix

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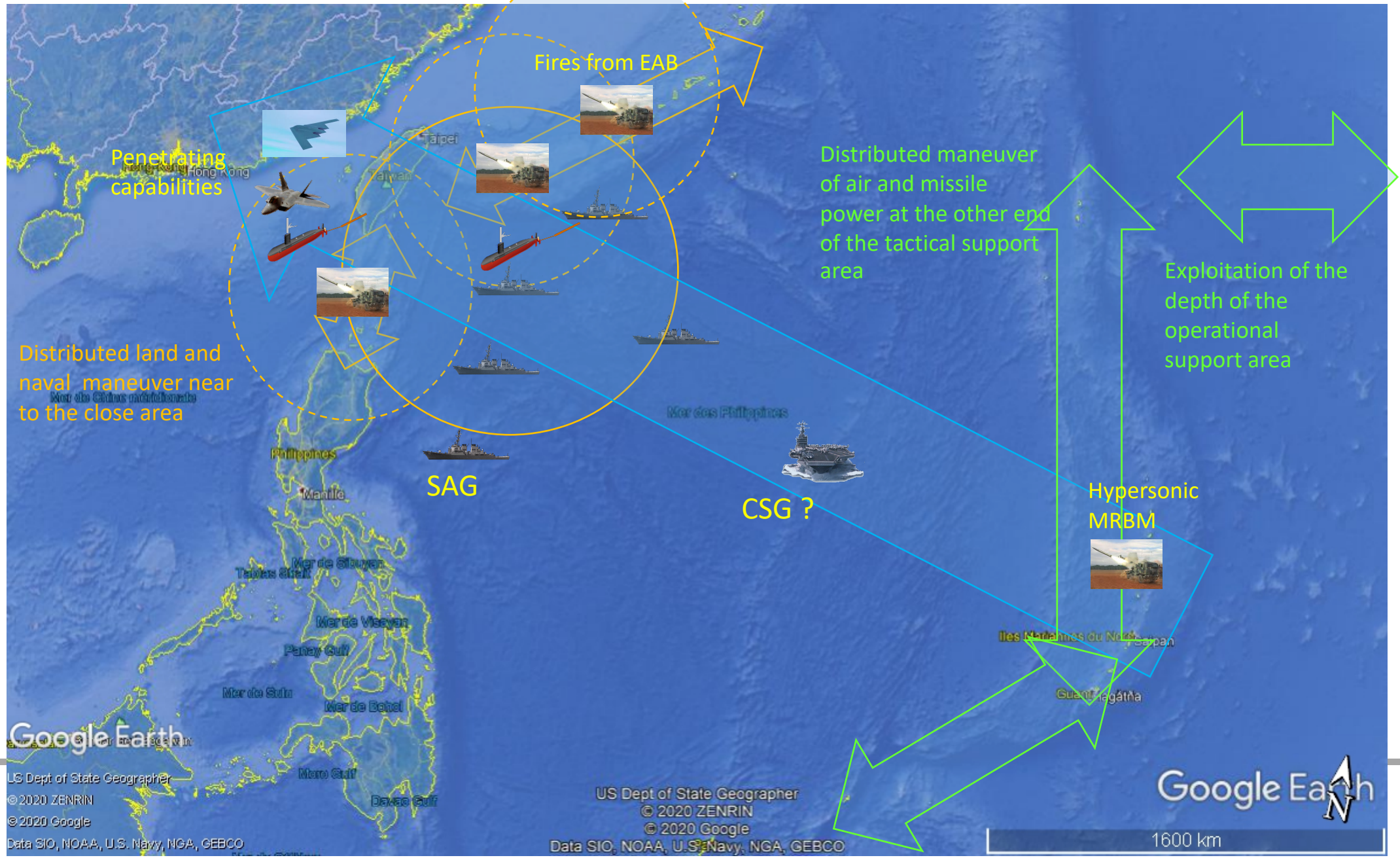
A range of new concepts and force design and capabilities initiatives to “regain the advantage”

- US Navy-US Marine Corps Team
  - New concepts
    - Distributed Maritime Operations (DMO)
    - Electromagnetic maneuver warfare (EMW)
    - Littoral Operations in a Contested Environment (LOCE)
    - Expeditionary Advanced Base Operations (EABO)
  - Integrated Naval Force Structure Assessment
  - New Marine Corps *Force Design 2030*
- US Army Multidomain Operations
- US Air Force Multidomain Operations & Operational Agility
- Joint All Domain C2 architecture
- « Regain the advantage » : USINDOPACOM capabilities estimate

(Very oversimplistic sketch of) the alleged emerging warfighting concept



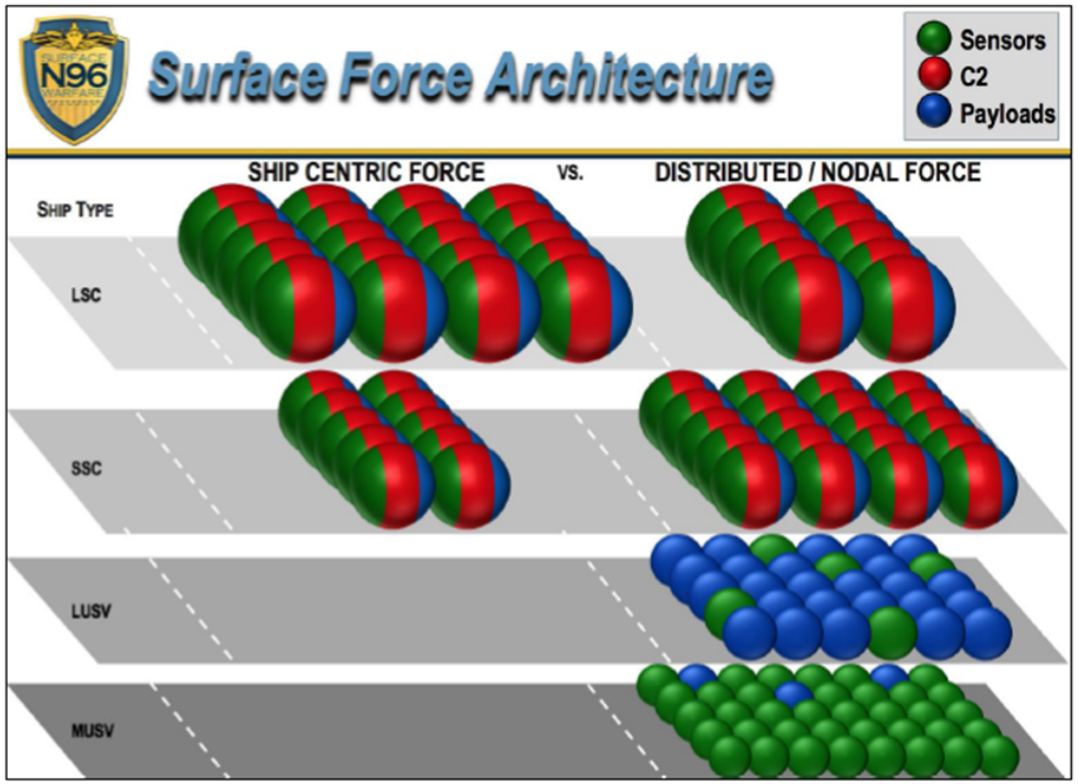
Some questions and debates

- Questions
  - Philippines and Japan convergence ?
  - Real room of maneuver accross the First Chain of Islands ?
  - Effects of EABO in large scale confrontation ?
  - Air superiority over the area ?
  - Mission Command vs. need for coordination ?

- Debates
  - Overspecialization of the Marine Corps ?
  - Suitability and sustainability of the future Integrated Naval Force Structure ?
  - Sustainability of the air force structure ?
  - Implementation of true joint all domain operations ?

Figure 1. Navy Briefing Slide on Surface Combatant Force Architecture

Each sphere represents a ship or unmanned surface vehicle (USV)



Source: Illustration accompanying Megan Eckstein, "Sea Hunter Unmanned Ship Continues Autonomy Testing as NAVSEA Moves Forward with Draft RFP," *USNI News*, April 29, 2019. The illustration was also included as Slide 2 in a Navy briefing entitled "Designing & Building the Surface Fleet: Unmanned and Small Combatants," by Rear Admiral Casey Moton at a June 20, 2019, conference of the American Society of Naval Engineers (ASNE).

Notes: Each sphere represents a ship or a USV. LSC means large surface combatant (i.e., cruiser or destroyer), and SSC means small surface combatant (i.e., frigate or Littoral Combat Ship). As shown in the color coding, the LSCs and SSCs are equipped with a combination of sensors (green), command and control (C2) equipment (red), and payloads other than sensors and C2 equipment, meaning principally weapons (blue). LUSVs and MUSVs, in contrast, are equipped primarily with weapons (blue) or sensors (green).

Ronald O'ROURKE, *Navy Large Unmanned Surface and Undersea Vehicles: Background and Issues for Congress*, Congressional Research Service Report R45757, 18 September 2019, p. 5

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