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PLA Reform and Systems Attack

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Feb 2022

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3 Legs of PLA Modernization

- Doctrine Modernization
  - What types of expected wars and how to fight them
  - Emphasis on joint operations and role of information
- Equipment Modernization
  - Mechanization of ground forces
  - Modern naval, air, missile, and ISR systems
  - Power projection and precision-strike capabilities
- Personnel and Organization
  - Recruitment, Promotion, Education, and Training
  - Major reform of organizational structure in late 2015

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Key Stages in PLA Modernization

- Lessons from the 1991 Gulf War
  - Highlighted importance of information and impact of ISR and PGM advances
  - Showed synergies from joint operations
- 1995-96 Taiwan Crisis and 1999 Kosovo War
  - Highlighted PLA weakness and vulnerability
  - Spurred PLA budget increases
- Joint Doctrine and Experimentation (1995-2013)
  - Third Plenum announced outlines of reform (2013)
- PLA Organizational Reform (late 2015)

PLA Doctrinal Hierarchy

- Military Strategic Guidelines define the primary opponent, the principal strategic direction, the basis of preparations for military struggle, and the main form of operations: "Winning informationized local wars"
- Operational Doctrine (and implementing regulations and training guidelines) describes how the PLA will fight
  - "Systems Confrontation" or "Systems Attack" is the PLA's "basic operational method" of warfare
  - "Integrated Joint Operations" are how the PLA expects to fight
- Campaigns describe how the PLA will conduct specific types of joint and single-service operations
  - Joint island landing campaign; joint blockade campaign; joint firepower strike campaign

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Systems Attack Warfare

- Information dominance crucial for “fighting and winning informationized wars”
  - Huge advantages from networked C4ISR make modern military forces stronger than their component parts
  - Control over the information domain allows combatant to dictate pace, direction and locale of conflict
  - Five key systems: *command system* (C2), *firepower strike system* (strike), *information confrontation system* (information attack/defense), *reconnaissance-intelligence system*, and the *support system* (logistics, maintenance, etc.)
- Modern warfare is “systems confrontation” rather than linear contest between platforms, units, or services
- Victory requires degrading adversary systems; protecting one’s own systems; seizing initiative

Theory of Victory: Fragment the Enemy's System

- Fragment the adversary's system into isolated component parts (make 1+1<2)
- Break essential links and nodes that promote system cohesion in order to sow confusion, degrade communications, and disorient adversary leadership
- System attack's ultimate goal is to paralyze the adversary force, degrading its ability to resist, eroding leadership will to fight, and slowing adversary decision-making
- Whichever side has a more networked, integrated, and cohesive force will have a shorter OODA (observe, orient, decide, and act) loop, act more efficiently, and have a better likelihood of victory
- Attacks will take place across all domains to degrade the system as a whole rather than focusing on attrition of forces

PLA Information War Concepts

- Cyber as asymmetrical weapon with low cost, high benefit, low risk; attribution is hard; allows fast, global attacks
- Dai Qingmin: “Integrated Network Electronic Warfare” (INEW) links cyber and EW attacks
- Ye Zheng: “Integrated Information and Firepower Warfare” stresses coordinating kinetic, information strikes to maximize effects
- Integrated Strategic Deterrence: cyber as means of cross-domain attacks and also contributes to overall deterrence/compellence

PLA Systems Attack Capabilities

- The PLA has invested heavily in ISR, long-range and precision-strike, electronic warfare, counter-space systems, and offensive cyber capabilities that can attack key nodes in adversary systems and the C4ISR network that supports them
  - DF-21D and DF-26 Anti-Ship Ballistic Missiles
  - Land-attack cruise missiles and accurate terminally-guided ballistic missiles
  - Anti-satellite systems and jamming capabilities
- These complement more capable conventional ships, submarines, and aircraft; longer-range offensive and defensive missiles; and longer-range bombers and aircraft carriers that are giving the PLA a significant power projection capability
- In a conventional war, many of these power projection capabilities would fall off significantly as the conflict gets further away from the Chinese mainland

Defending PLA Systems

- China expects that the U.S. will also try to degrade the PLA's ability to operate as a coherent force; their doctrine is based on watching how the United States fights
- Air and missile defenses and anti-access/area-denial (A2/AD) systems will make it harder for adversaries to strike targets in China
- The PLA is training and equipping its force to operate independently, autonomously, and resiliently, with a notable emphasis on operating in a complex electromagnetic environment
- This is in tension with PLA organizational culture, which is more focused on obedience to superiors than on a "mission command" approach that emphasizes commanders taking the initiative
- PLA-wide efforts to improve C4ISR and practice integrated joint operations seek to push information down to the operational level, but also create temptations to micro-manage operations

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From Asymmetrical to Symmetrical?

- Previous PLA thinking emphasized using asymmetric means to target U.S. vulnerabilities such as dependence on space assets for C4ISR and on aircraft carriers and airfields for power projection
  - This gave a weaker PLA a chance at victory over a superior U.S. force
- PLA efforts to harness the operational benefits of joint operations and networked C4ISR are producing a military that is much more capable, but which now shares some U.S. military dependencies and vulnerabilities, especially when operating overseas
- Systems attack can be thought of as a means of prevailing in war fought on more equal terms against a more symmetrical enemy
- Some of the capabilities the PLA needs are still aspirational, but the intent of modernization efforts is clear
- The complexities of doing net assessments of systems confrontation warfare likely increase Chinese uncertainty about outcomes, especially given the PLA's lack of combat experience

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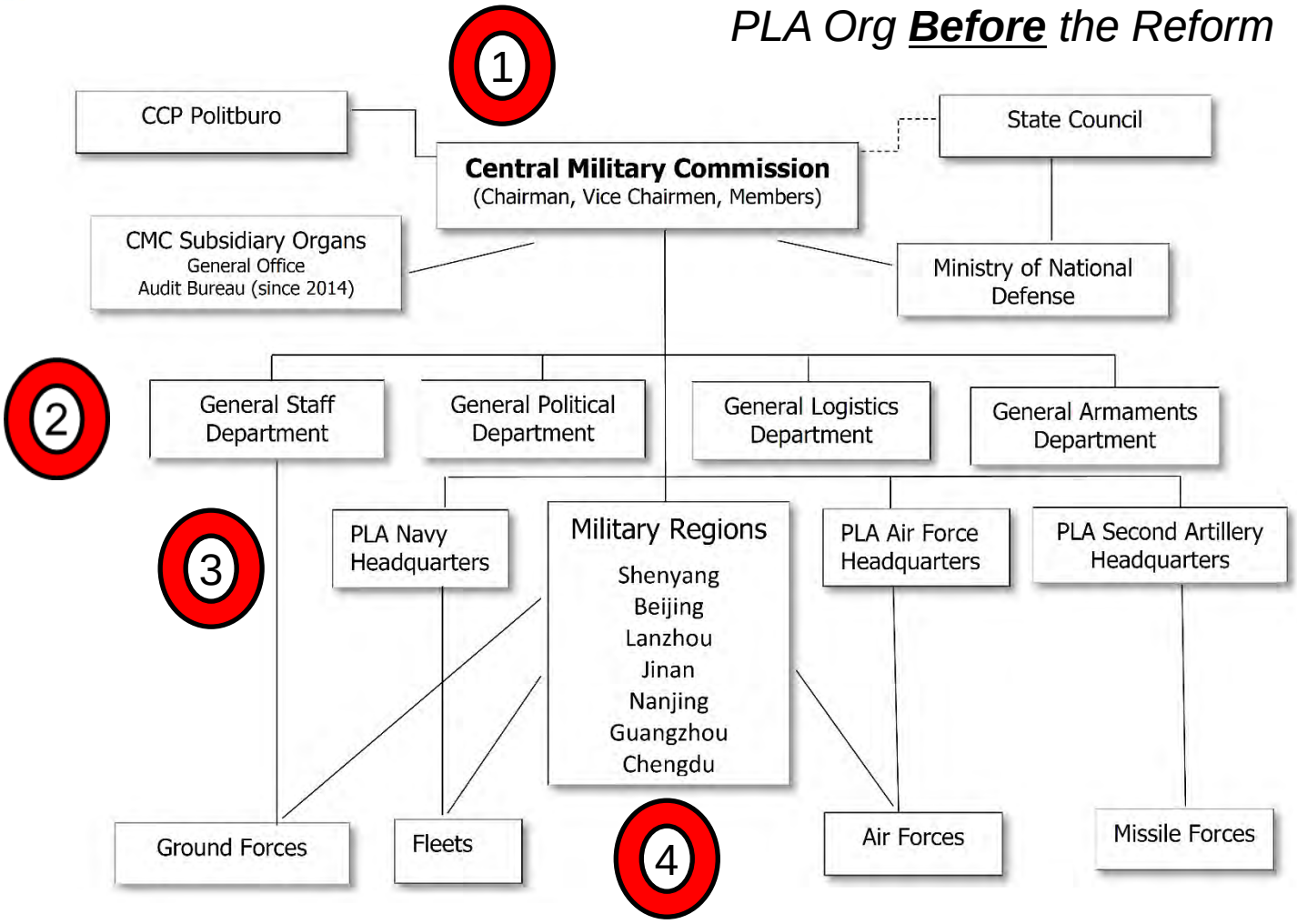
Pre-Reform PLA

*PLA Org **Before** the Reform*



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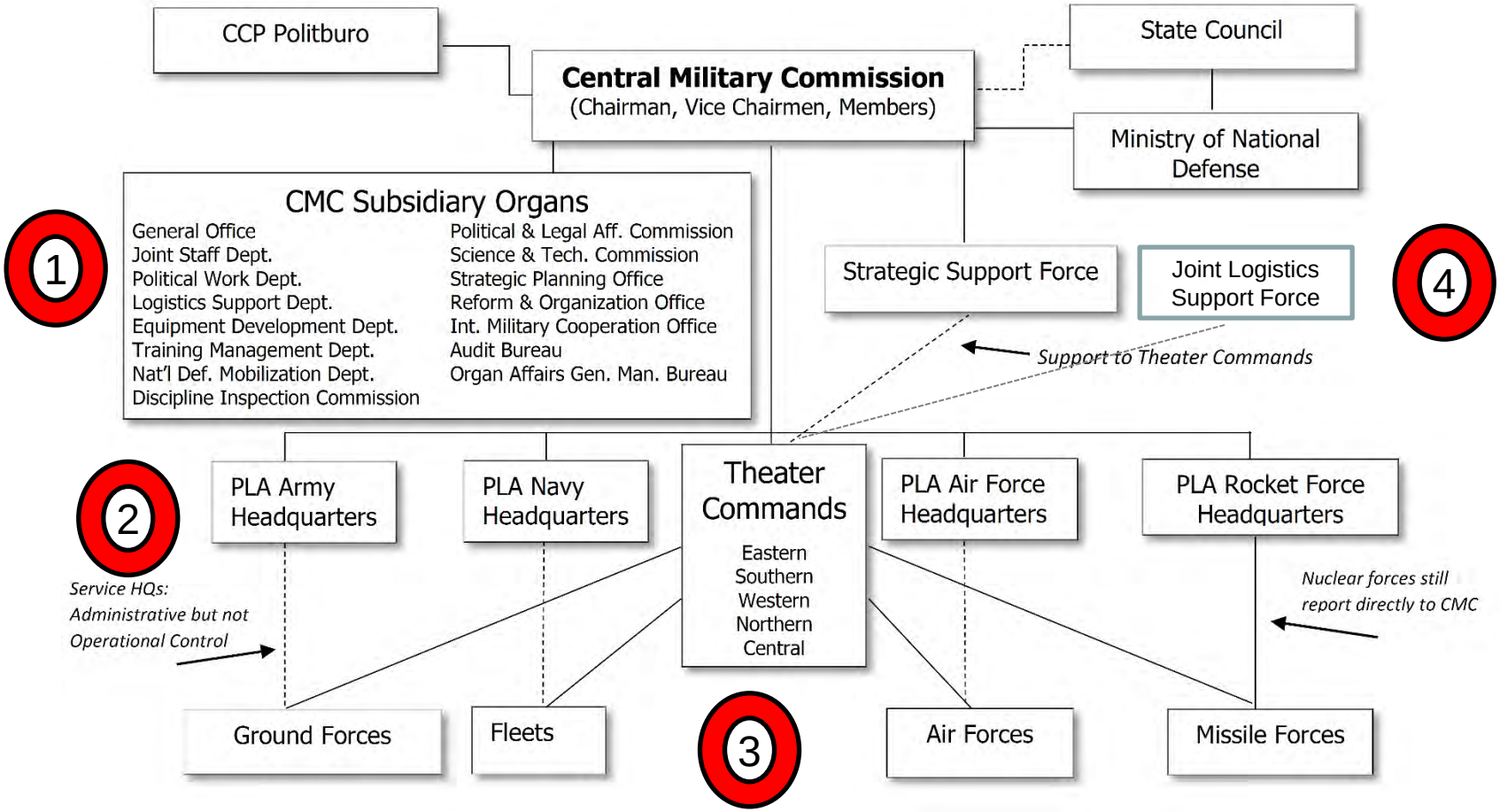
Post-Reform PLA

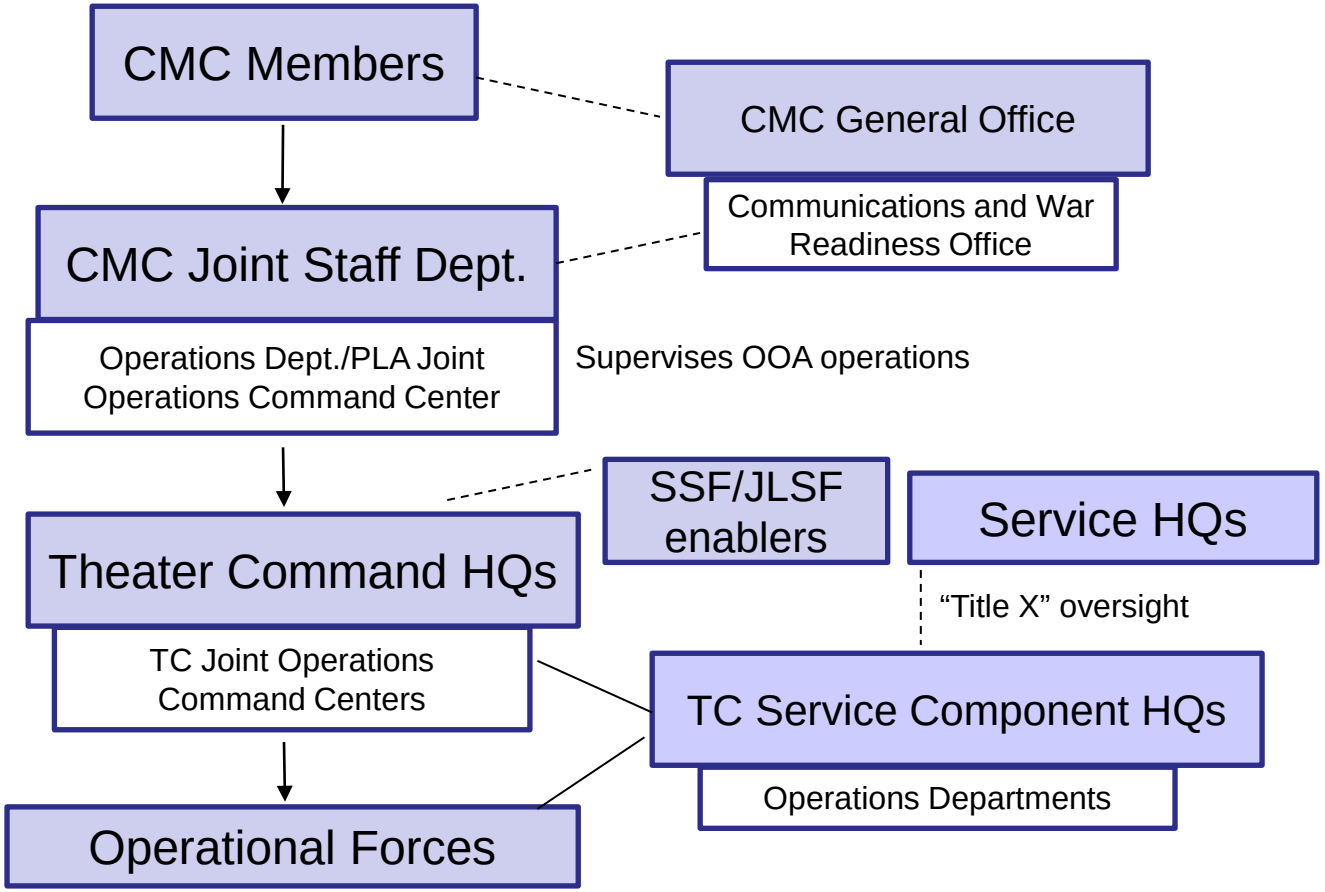
*PLA Org **After** the Reform*



A New Joint C2 Structure

Strategic Decision-Making

Operational Decision-Making



Strategic Support Force

- Established in 2016 to develop, integrate, and execute information operations
- Combines preexisting PLA space, cyber, EW, and psychological warfare capabilities into one force
- Tasked with “securing information dominance” with strategic, operational, tactical cyberspace operations
  - SSF would take lead in targeting U.S. military networks, comms, and ISR assets in wartime
  - Support PLA national and theater level units with space-based comms and information assurance
- Seek synergies from cross-domain applications

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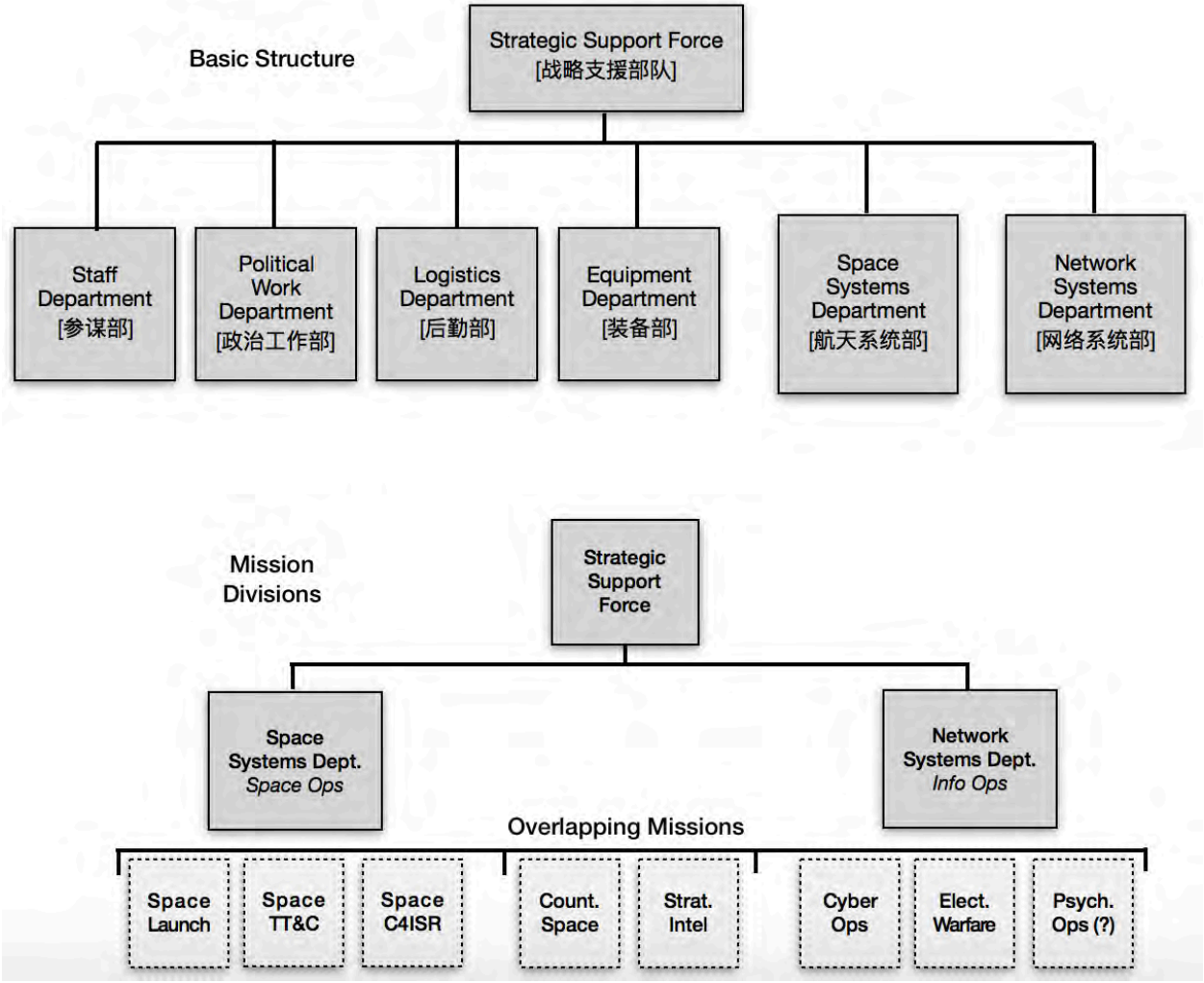
Strategic Support Force



Building a “Modern Major General”

- **Education system:** Realigned and consolidated PME system aims to offer more content in joint operations to more officers at more levels
- **Training system:** TCs taking the lead in joint training; “on-the-job” training in joint command/staff duties
- **Personnel system:** More joint opportunities; discussion of formal joint assignment system and rotational assignments
- **Changes to grade/rank and promotion systems:** missing grades in reorganized PLA

Xi visits PLA NDU, March 2016

Many interdependent elements that have to all change at once!

Assessment

Near-term disruption

- New leadership, new roles/responsibilities for service HQs/TCs, new lineup of CMC departments all create organizational disruption
- Reduction of 300,000 personnel, mostly from the army
- Major reorganizations of PLAA, PAP, PLAAF; new SSF, JLSF

Long-term performance improvements

- Joint C2 system seems workable for regional contingencies, but challenged for high-end combat “beyond borders”
- Qualified joint commanders and staffs critical for success
- Joint training, PME, assignments key to better personnel

Bottom Line: PLA more confident, capable of conducting integrated joint operations against regional adversaries; better ability to counter U.S. intervention

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Milestones of Future Progress

- Continued shift in manpower/budgetary resources to PLAN, PLAAF, PLARF, and SSF
- Increase in scale, frequency, and complexity of joint training
- Integration of SSF and JLSF capabilities into joint exercises and operations
- Deeper integration of SSF space, cyber, and information capabilities to achieve synergistic effects
- Effective operational cooperation between CMC/Joint Staff Department and Theater Commanders
- Services seeking to developing joint synergies rather than competing for resources and missions

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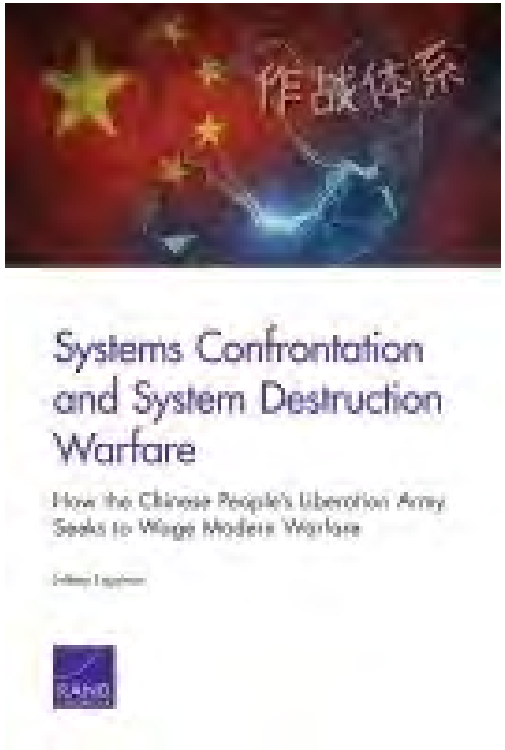
Questions?



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Backup Slides

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- John Costello and Joe McReynolds, *China's Strategic Support Force: A Force for a New Era*, *China Strategic Perspectives* 13 (October 2018).
- Phillip C. Saunders Arthur S. Ding, Andrew Scobell, Andrew N.D. Yang, and Joel Wuthnow, eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms* (Washington, DC: National Defense University Press, 2019)

Systems Destruction Warfare

- Conflict is won by the belligerent that can disrupt, paralyze, or destroy the operational capability of enemy's operational system through kinetic *and* nonkinetic strikes against key points and nodes

1. Flow of Information	2. Essential Elements	3. Operational Architecture	4. Time Sequence
Disrupt or destroy: • Key data links • Information network sites	Disrupt and paralyze: • C2, recon-intelligence, firepower, maneuver, protection, support, etc., capabilities	Destroy: • Physical nodes of essential elements	Disrupt and paralyze: • Reconnaissance-control-attack evaluation process

Jeffrey Engstrom, *Systems Confrontation and Systems Destruction Warfare* (RAND, 2018).