



Mobility Capabilities and Requirements Study (MCRS) 2018

Executive Summary

1. Overview. The study assessed the ability of the joint mobility force to accomplish its role in the 2018 National Defense Strategy (NDS) wartime missions based on anticipated Fiscal Year 2023 fleet capabilities and capacities. The NDS wartime construct calls for a fully mobilized joint force to be shaped, sized, postured, and readied to simultaneously deter nuclear attack, defend the homeland, defeat a great power, deter in a second theater, and disrupt terror.

- The study underscored the importance of ongoing Department of Defense (DOD) efforts to build readiness for combat across all mobility fleets, recapitalize sealift, and modernize tanker aircraft. The study also accentuated the need to mitigate the mobility impacts of operating in a contested environment and reducing mission-critical cyber vulnerabilities across the Joint Deployment and Distribution Enterprise (JDDE).
- To benchmark combatant commander mobility requirements in contested environments, the study used current, approved operation plans combined with forward-looking threat assessments to examine a range of potential adversary impacts on mobility forces, critical mobility nodes/infrastructure, and global command and control systems.
- The DOD has begun a process to update and integrate war plans, and this study's results will be subject to change based on the outcomes of these efforts.

2. Background. MCRS-18 was directed by the National Defense Authorization Act (NDAA) of Fiscal Year 2018. The study was co-led by U.S. Transportation Command's Joint Distribution Process Analysis Center (JDPAC) and the Office of the Secretary of Defense, Cost Assessment and Program Evaluation (CAPE) organization. The Joint Staff, component services, combatant commands, and the Maritime Administration (MARAD) within the U.S. Department of Transportation also contributed to the study, which began on March 8, 2018, and concluded Jan. 9, 2019.

3. Methodology. MCRS-18 estimated the number of airlift aircraft, tanker aircraft, and sealift ships, to include commercial airlift and sealift assets, needed to meet combatant commander mobility requirements consistent with the NDS strategic environment, wartime missions and simultaneity guidance.

The study focused significantly on identifying mobility impacts in contested environments based on credible threat estimates, which focused on the adversary's capabilities and intent to

disrupt mobility operations. The ability to decompose adversary actions into specific mobility impacts was based on analytic work available in the limited timeframe for the study.

Finally, the study measured operational risk based on the Chairman of the Joint Chiefs of Staff (CJCS) risk management classifications.

4. Fiscal Year 2023 Fleet Size Estimates. The fleet size estimates in the chart below reflect the study's findings on the number of airlift aircraft, tanker aircraft, and sealift ships (to include commercial airlift and sealift assets) needed to meet combatant commander mobility requirements consistent with the NDS wartime missions in 2023, and available, approved demands.

Mobility Capability	Fleet Size Estimate	Unit of Measure
Strategic Airlift Aircraft	275	C-17/C-5
Commercial Airlift: Civil Reserve Air Fleet (CRAF)	257	Cargo/Passenger wide-body equivalent
Theater Airlift Aircraft	300	C-130
Organic DOD Controlled Sealift Ships	15.3	Million square feet of Roll on/Roll off capacity
Commercial Sealift: Voluntary Intermodal Sealift Agreement (VISA), and Allied/Partner Nations' Ships	3.9	Million square feet of Roll on/Roll off capacity
Air Refueling Tanker Aircraft	479	KC-46/KC-135

5. Submission to Congress. Findings were submitted to Congress on Jan. 10, 2019, to fulfill the tasking directed by the NDAA FY 2018. The findings included a detailed explanation of the strategy and associated force sizing and shaping constructs, associated scenarios, and assumptions used to conduct the analysis; estimated risk based on CJCS risk management classifications; and implications of operations in contested areas with regard to the Civil Reserve Air Fleet (CRAF).

6. Resourcing Actions. Resourcing actions will be determined by the Departments of the Air Force and the Navy. As the Joint Deployment and Distribution Coordinator, the U.S. Transportation Command will advocate for enterprise resources.

7. Follow-on Actions. MCERS-18 is complete. USTRANSCOM will continue to assess its ability to project and sustain military forces with this fleet in the context of the NDS's strategic environment, priority wartime missions.