

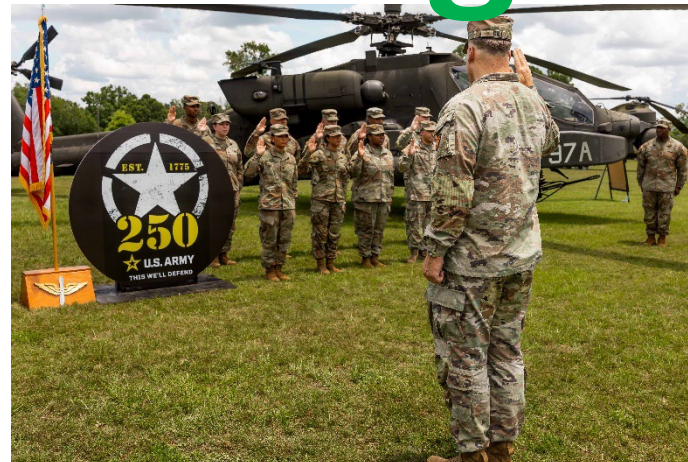




OUTLOOK[®]
LEADERSHIP CONFERENCE



Do We Finally Have A New Way Of Doing Business?



OBJECTIVES FOR TODAY

- **Broad understanding of defense budget structure and priorities.**
- **Nobody becomes an expert in defense economics, but...**
- **...as leaders in your company and your community, take away a better perspective and curiosity of the world's events.**
- **Some take-aways for the industry.**
- **Some take-aways for leadership.**

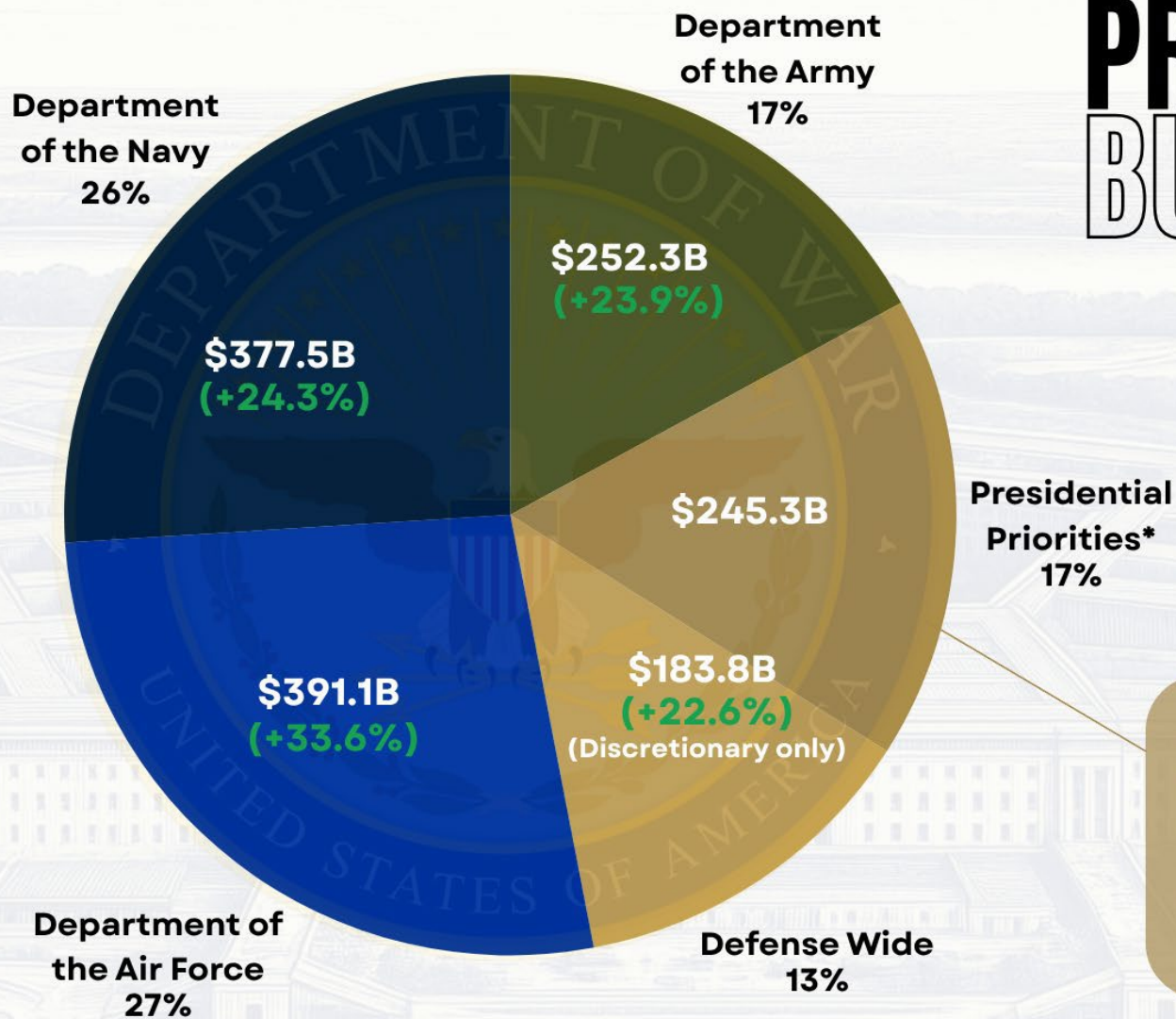


Topics for Today

- DoW Budget and Priorities
- Challenges for DoW and National Security
- What about those drones?
- Comments on China and Ukraine
- Comments on textiles in DoW
- Comments on topics for later today and tomorrow

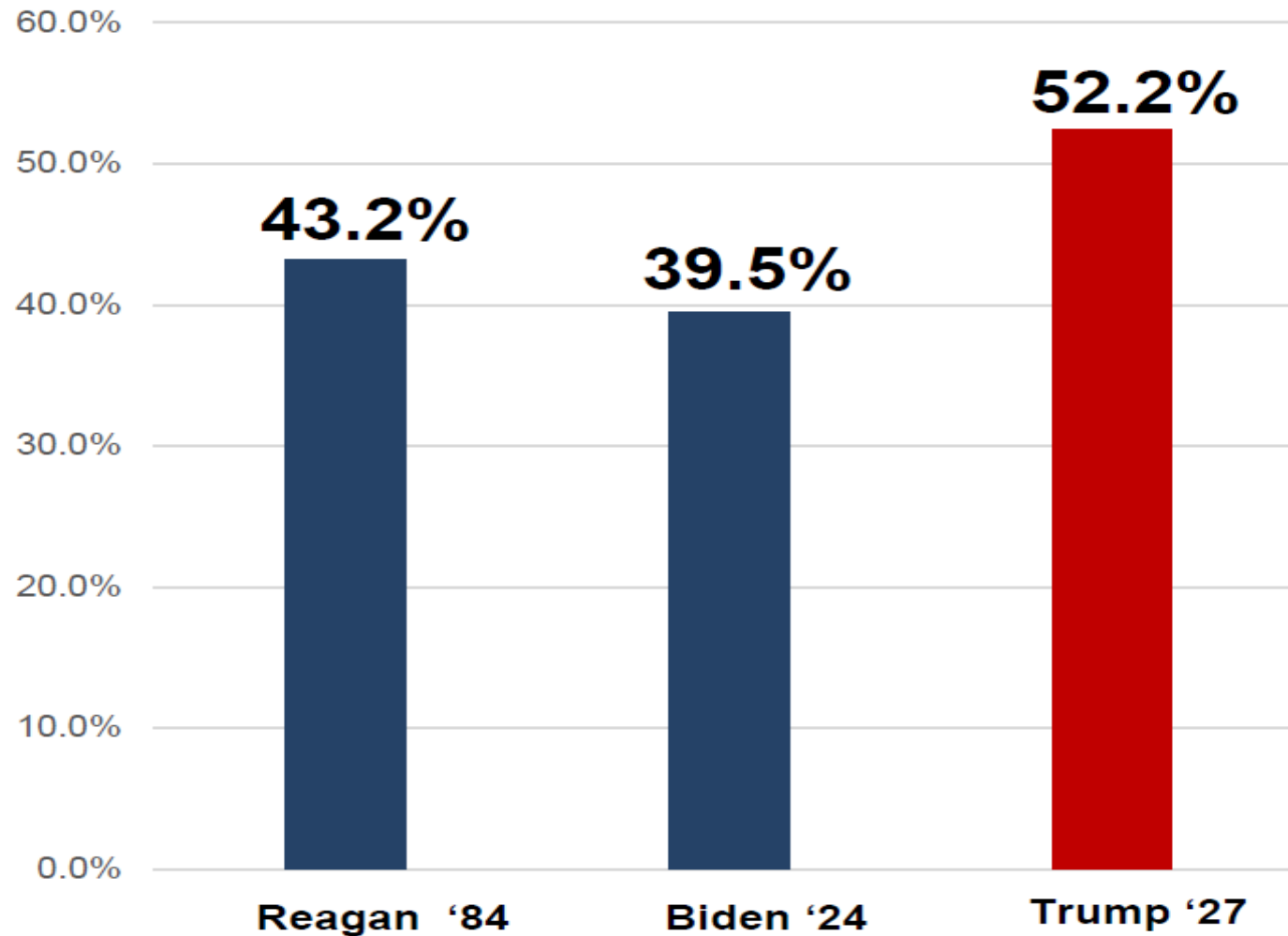


PRESIDENT'S BUDGET



Includes investments in:
The Defense Industrial Base
Golden Dome
Next-Generation Tech
Drone Dominance
Critical Minerals
Munitions
Infrastructure

Investment in Capabilities*



THAAD AIR DEFENSE SYSTEM

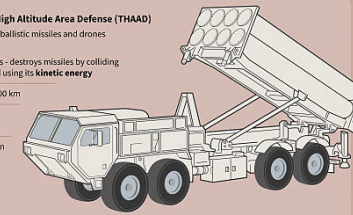
US-made Terminal High Altitude Area Defense (THAAD)
Capable of intercepting ballistic missiles and drones

Warhead: No explosives - destroys missiles by colliding into them at high speed using its **kinetic energy**

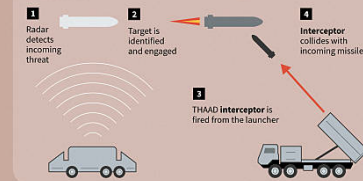
Range: Between 150-200 km

Altitude: Above and in the Earth's atmosphere

Cost: Around \$13 million for each THAAD missile



THAAD BATTERY OPERATION



Sources: US Congress, CSIS, US Department of Defense, Lockheed Martin

Schematic diagram, illustrations and trajectories not to scale



PRESIDENT TRUMP'S SECOND TERM

President Biden

2.9%

FY25

3.3%

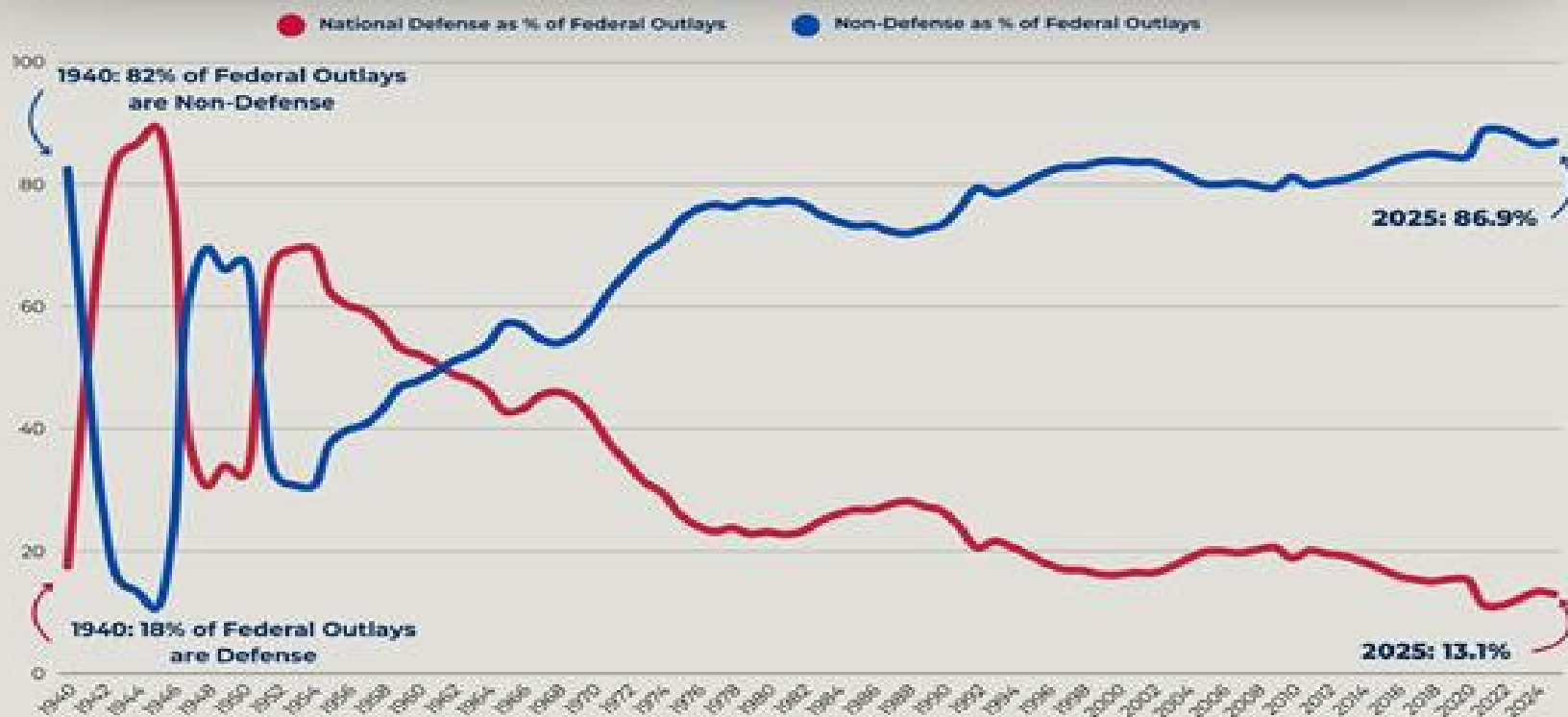
FY26

4.5%

FY27

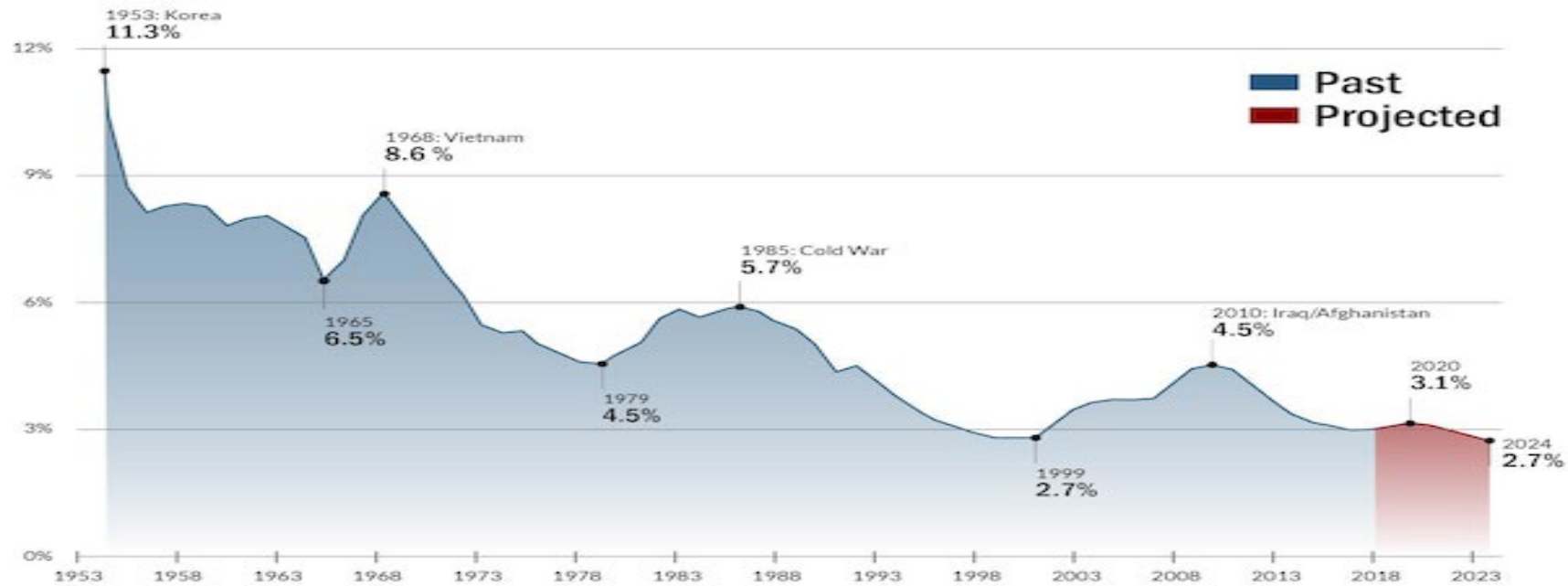
SOURCES: OMD and CBO

SHRINKING DEFENSE AS A PERCENTAGE OF FEDERAL OUTLAYS



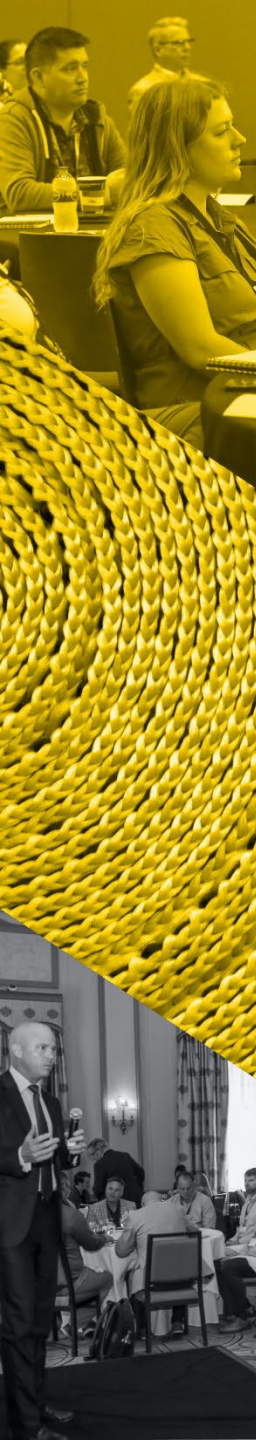
Source: OMB - Shrinking Defense as Percentage of Federal Outlays 1940 - 2025

Defense Spending as a % of Gross Domestic Product (GDP)

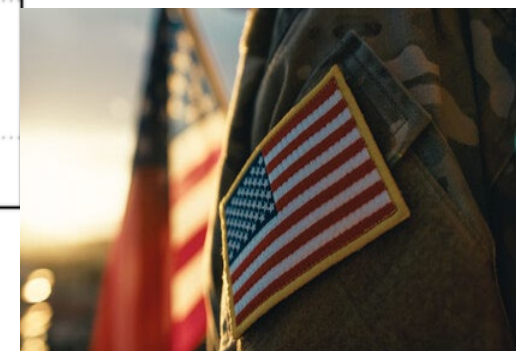
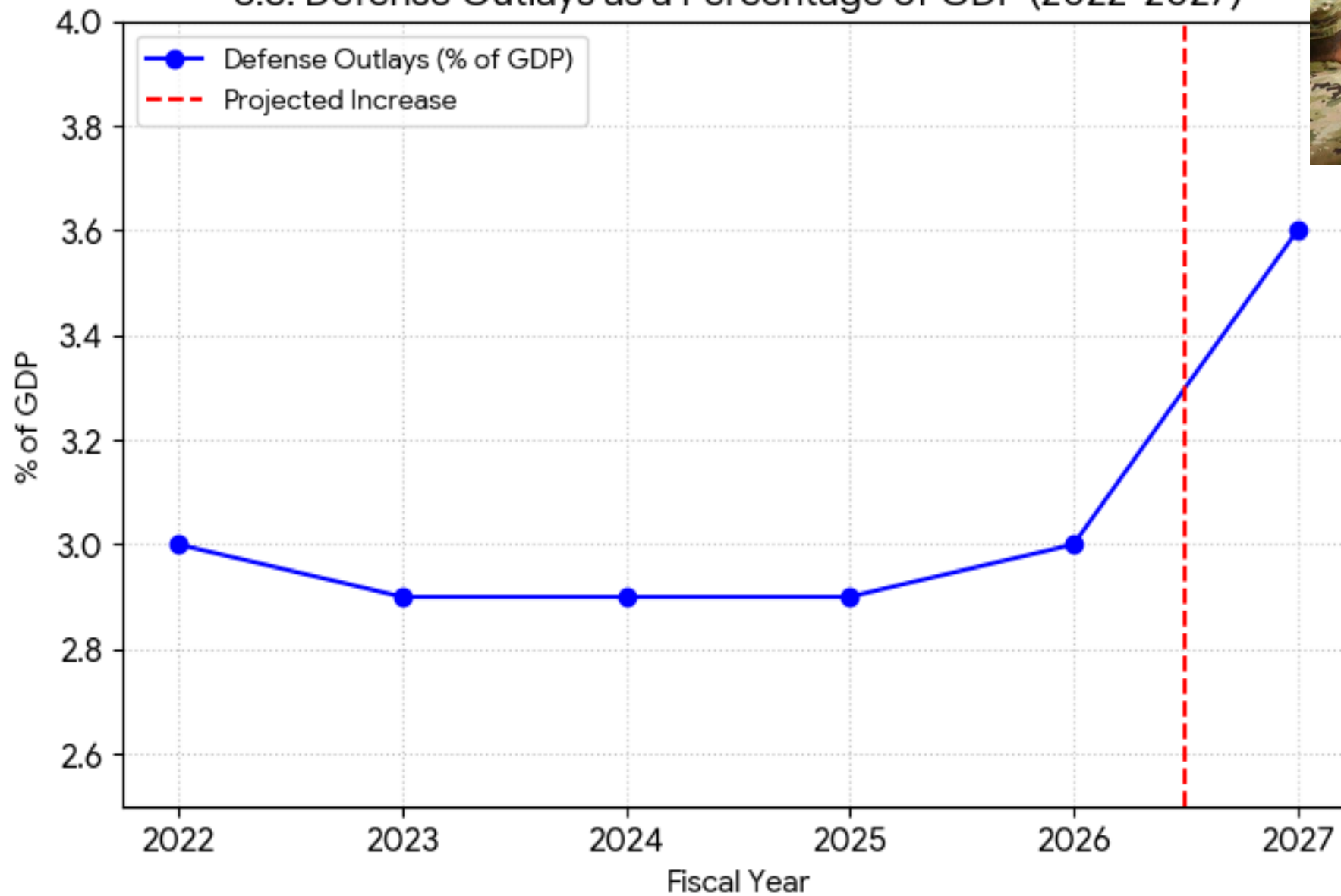


Source: National Defense Budget Estimates for FY 2019 (Table 6-13); historical and projected GDP from both the FY 2019 and FY 2020 Budget of the United States Government.

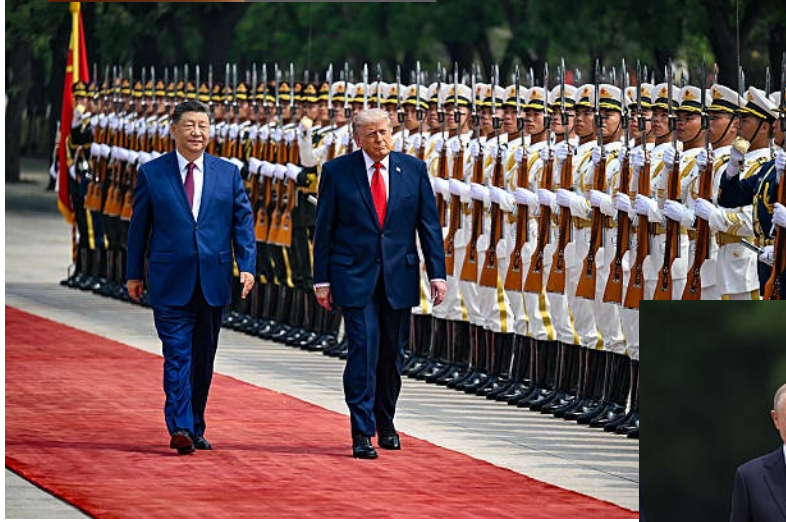
DOD funding is near a record low as a percentage of our economy



U.S. Defense Outlays as a Percentage of GDP (2022-2027)



China



U.S. China Military Balance Forces Available in the Indo-Pacific 1999

China Regionally Concentrated



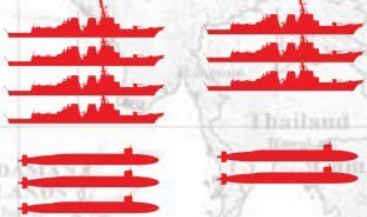
LAND



AIR



MARITIME



MISSILES



ICBM IRBM MRBM SRBM

U.S. Globally Distributed



LAND



AIR



MARITIME



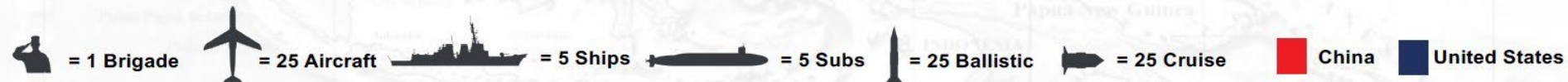
MISSILES

No U.S. Equivalent In Theater

U.S. Advantage

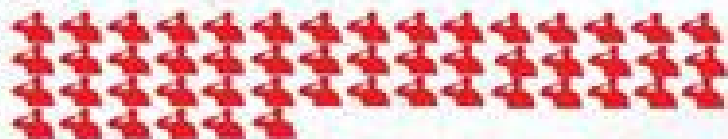
Modernized PLA Forces Only
Area of PLA Influence

Forward-Stationed
U.S. Forces
(West of Int'l Date Line)



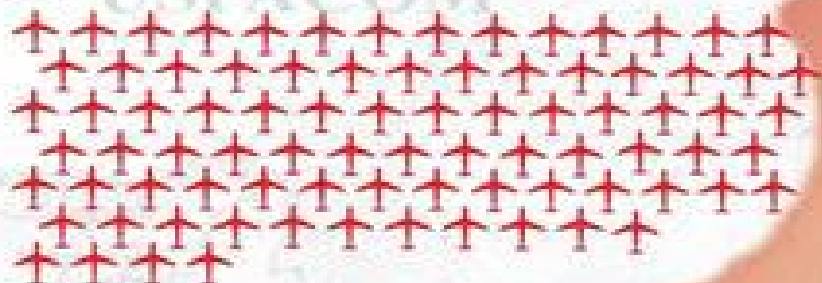


LAND



Growing China Advantage

AIR



MARITIME



MISSILES



= 1 Brigade = 25 Aircraft = 5 Ships = 5 Subs = 25 Ballistic

U.S. China Military Balance Forces Available in the Indo-Pacific 2026



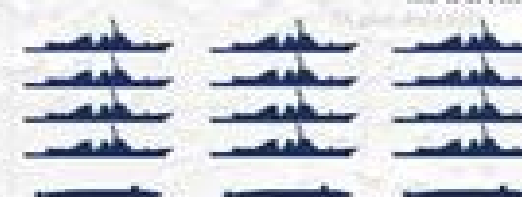
LAND



AIR



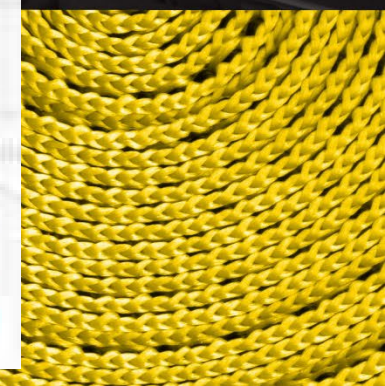
MARITIME



MISSILES



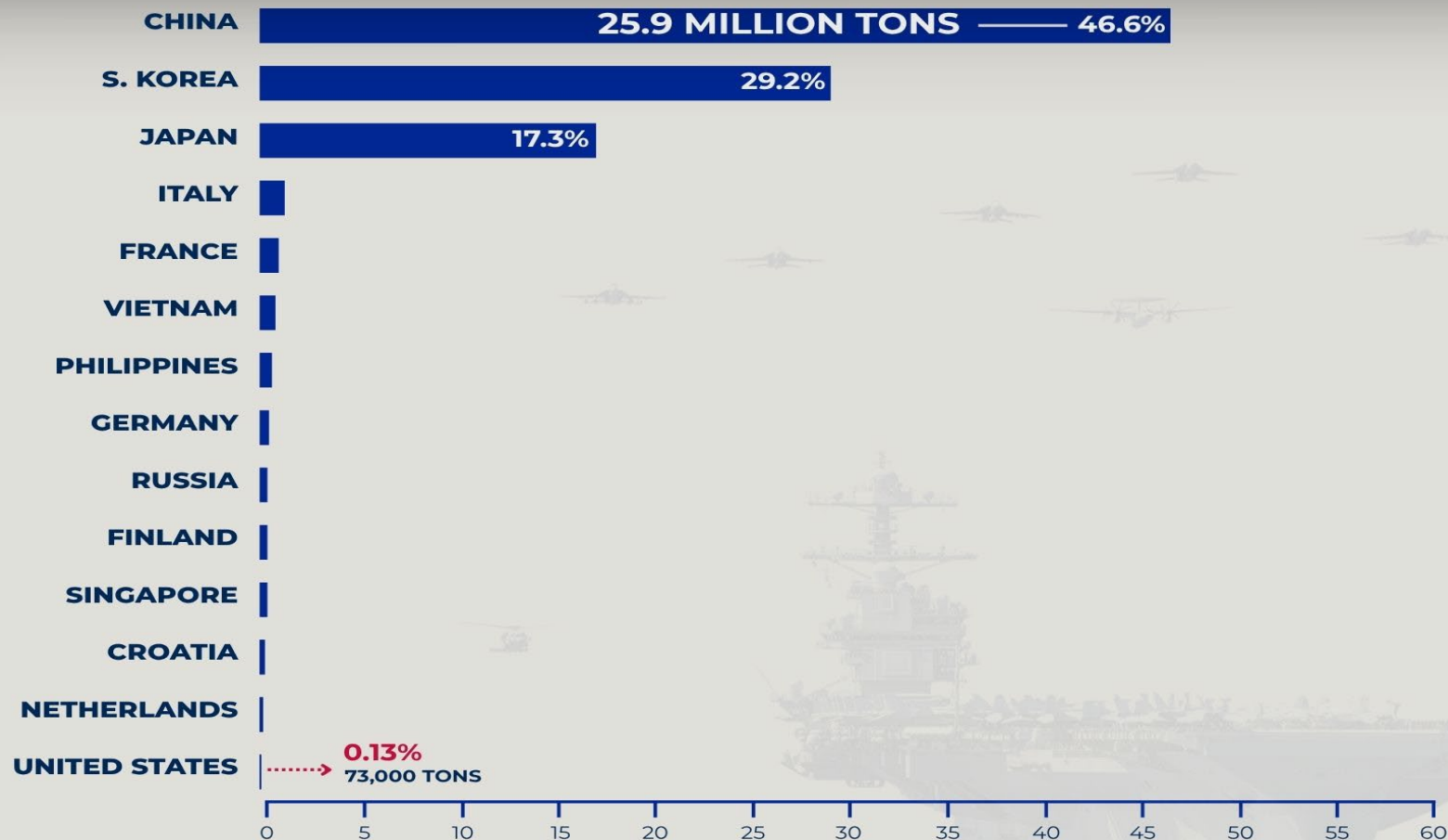
= 25 Ballistic = 25 Cruise



U.S. SHIPBUILDING COMPARED TO REST OF WORLD

Source: Financial Times / Unctad

Percentage of global gross tonnage built, 2022, ranked by country of origin

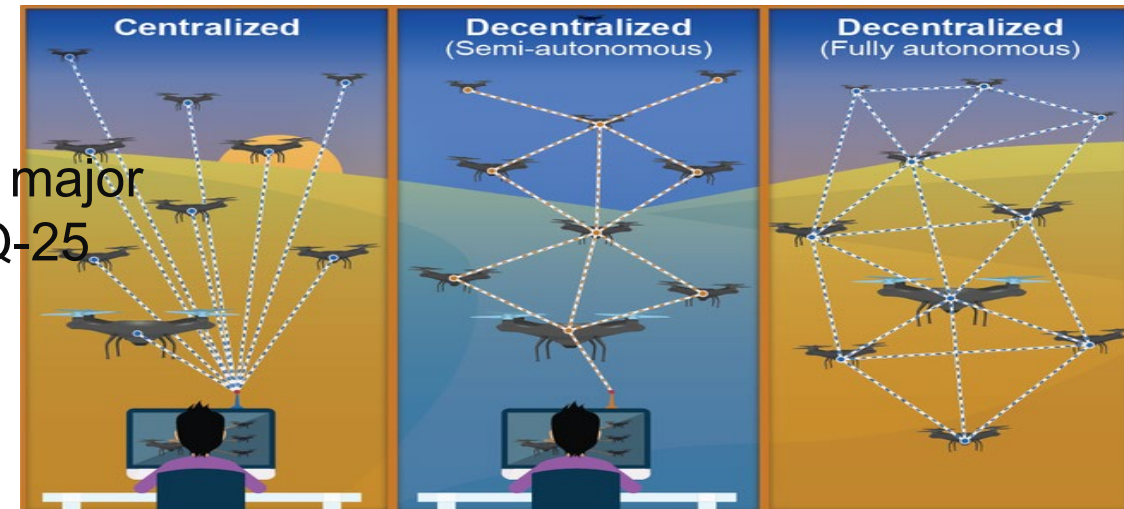


Source: Financial Times / Unctad



Drone Dominance and Counter Drone Technologies

- **\$53.6B** focused in 5 areas:
 - Contested Logistics, Collaborative Autonomy, Force Generation, Counter Autonomous Systems, and Asset Purchases/Industrial Demand Signal.
- **\$20.6B**
 - Focus includes one-way attack, counter small UAS, and major programs to include Collaborative Combat Aircraft and MQ-25 refueler/ISR platform.



Source: GAO analysis (data). Sonar512/topvectors/stock.adobe.com (images). | GAO-23-106930

Iran-made drone Shahed 136

A long-range suicide drone for hitting fixed targets

Deployed by Russian forces in Ukraine



- **Manufacturer:** HESA (Iran)
- **Launched:** 2021
- **Warhead:** 36 kg explosive charge
- **Range:** 2,500 km
- **Maximum speed:** 185 km/h
- **Weight:** 200 kg

Length: 3.5 m
Wingspan: 2.5 m

Sources: US Army, Army Recognition, Military Aviation

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LUCAS drone

Experts say the US military's Low-Cost Uncrewed Combat Attack System (LUCAS) is modelled on Iran's Shahed drone.

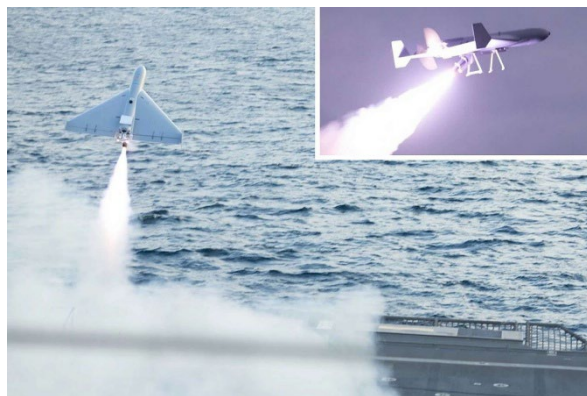
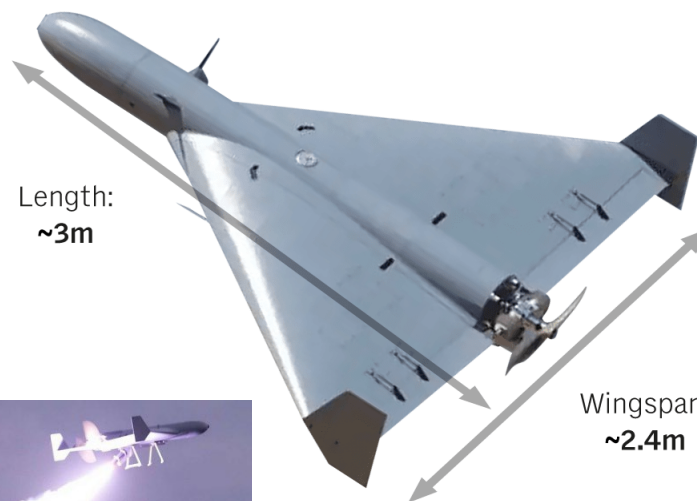
💰 Unit cost: ~US\$35,000

📏 Range: Up to ~800 km

🔧 Engine: Piston engine with rear propeller

💣 Explosive payload: ~18kg

🚀 Type: Kamikaze drone / Loitering munition



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AFP

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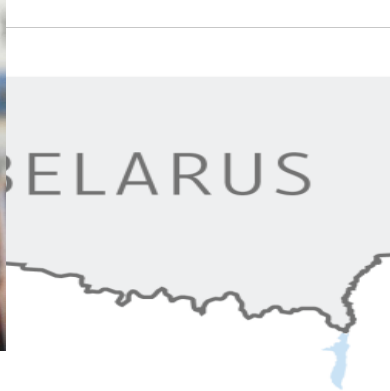
Length:
~3m

Wingspan:
~2.4m

“A Taste of Its Own Medicine? US Confirms First Combat Use of Shahed Clones in Iran” (NEXGENDEFENSE 03/04/26)

cna

UKRAINE



UKRAINE



NATO
+
OTAN



Geography and Terrain Is Everything in Ground Warfare



Areas of Russian military control in Ukraine



What Next ?

First Presented: April 25th, 2022

■ Nearly universal flawed assumptions regarding the success for Russia for complete occupation (me included).

■ Human suffering.

■ **US (and NATO) bias against provoking escalation has huge humanitarian and military implications for Ukraine.**

- Vehicle losses for both sides (of greater significance for the Russians).
- Regenerating losses for Ukrainians.
- The longer this goes on, resupply goes from ad hoc to some sort of systemization.
- Russia lacks the combat power for maximal objectives; cannot conduct major simultaneous operations; and is challenged in taking (and holding) major cities. Important political vs military options.
- Ukraine has demonstrated the national will, but lacks the combat power for sustained offensive operations and to expel Russians from controlled territory. Long defensive lines with a shrinking force.



Each side lacks the forces for an ideal outcome as seen by each.

Without a negotiated settlement, this becomes a protracted stalemate.



* Assessed Russian advances are areas where ISW assesses Russian forces have operated in or launched attacks against but do not control.

As of May 14, 2026



April 13, 2022

Areas of Russian military control in Ukraine

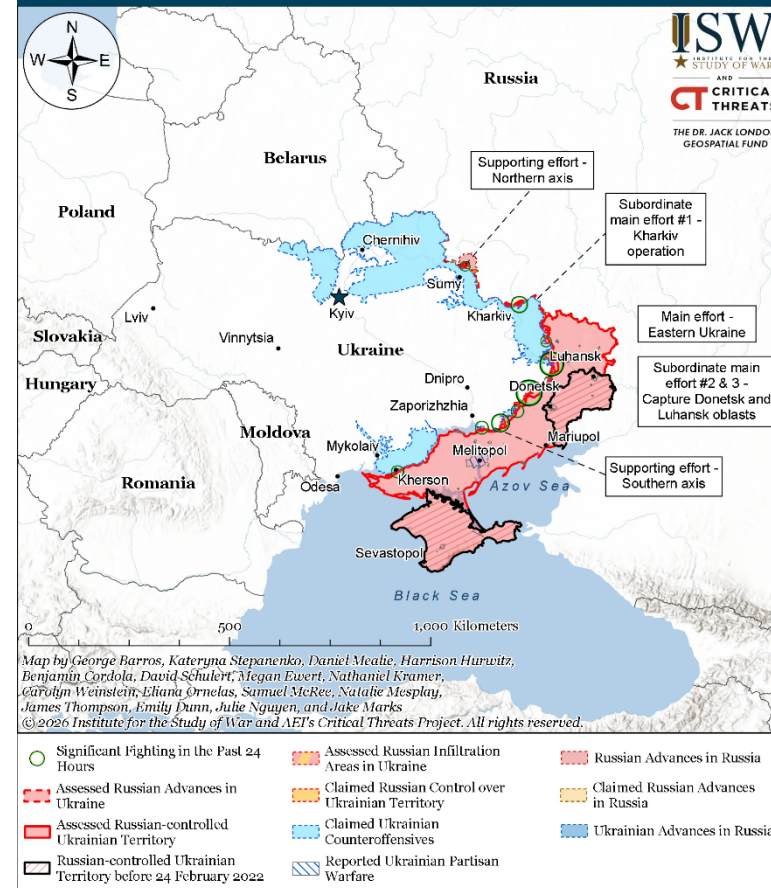


Source: Institute for the Study of War (21:00 GMT, 13 April)

BBC

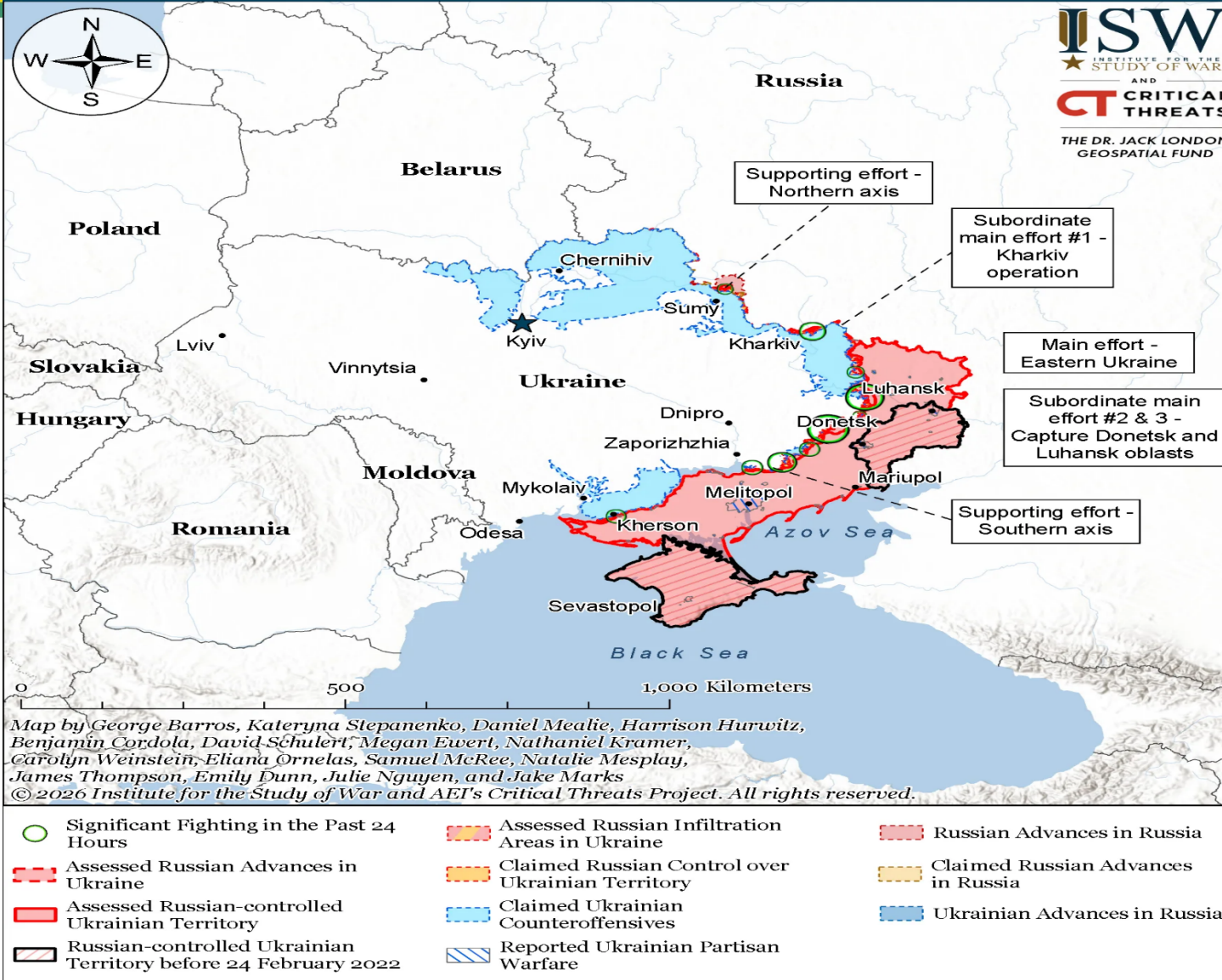
May 14, 2026

Assessed Control of Terrain in the Russo-Ukrainian War May 14, 2026 at 1:30 PM ET

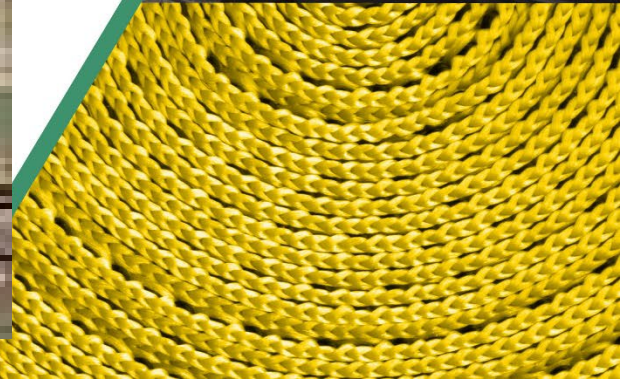


Russia controls approx. 18% of Ukraine

Assessed Control of Terrain in the Russo-Ukrainian War May 14, 2026 at 1:30 PM ET



Implications for Textiles



Office of the Assistant Secretary
of the Army
(Acquisition, Logistics and Technology)

As of 03/23/26

With
Links!!



Capability Program Executive-Ground (CPE-G)

<https://api.army.mil/e2/c/downloads/2026/04/24/916662bb/20260323-asaalt-org-chart-pae-cpe-final.pdf>

<https://asc.army.mil/web/tag/cpe-ground/>

130 Programs of Record; 253 Products

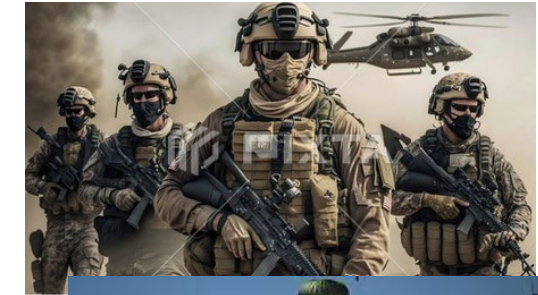
Program Manager (Organizational Clothing and Individual Equipment/Personal Protective Equipment (OCIE/PPE)

<https://cpeground.army.mil/Equipment/Equipment-Portfolio/PM-OCIE-PPE-Portfolio/>

Army Combat Boot
Army Combat Uniform
Ghillie Suit Accessory Kit (GSAK) Upgrade
Sleep Systems
Parachute Systems
Others

Protective Eyewear
Modular Scalable Vest
Advanced Combat Helmet
Others

Helmet Systems
Oxygen Delivery Systems
Others



US Army DEVCOM, Soldier Center

<https://sc.devcom.army.mil/>

<https://sc.devcom.army.mil/partner-with-us-1/>

- **CRADA: Cooperative Research and Development Agreement**
- **Unsolicited Proposals**
- **Patent License Agreements**
 - **Materials Incorporating Antimicrobial Polymers**
 - **Chlorine Dioxide for Surface Decontamination**
 - **Functional Fit System for Apparel**
 - **Textile Composite to protect against highly toxic agents and chemicals**
 - **Integrated Body Armor Garment**
 - **Pant-integrated knee pad**
 - **Blast debris protective harness for lower torso and extremities**
 - **Improved flame-resistant fabrics**



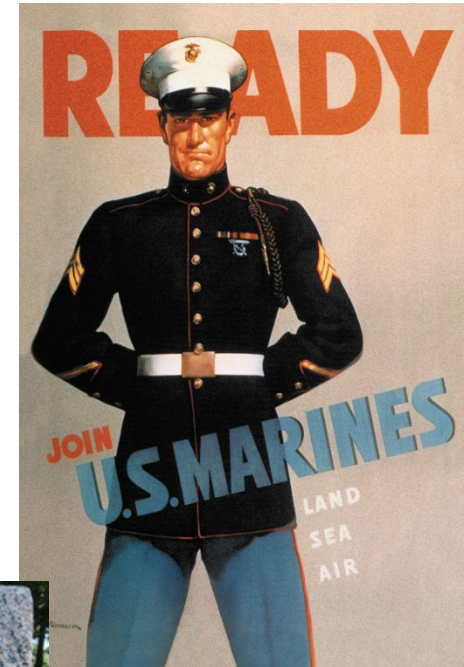


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Further Thoughts For This Outlook

- **Innovation: What does this REALLY mean?**
- **Leadership Conversations**
- **Consider the implications brought by Palmer Luckey of Anduril**
 - <https://www.youtube.com/watch?v=--Ef5Q-3lq8>
 - https://www.ted.com/talks/palmer_luckey_the_ai_arsenal_that_could_stop_world_war_iii?utm_campaign=tedspread&utm_medium=referral&utm_source=tedcomshare





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