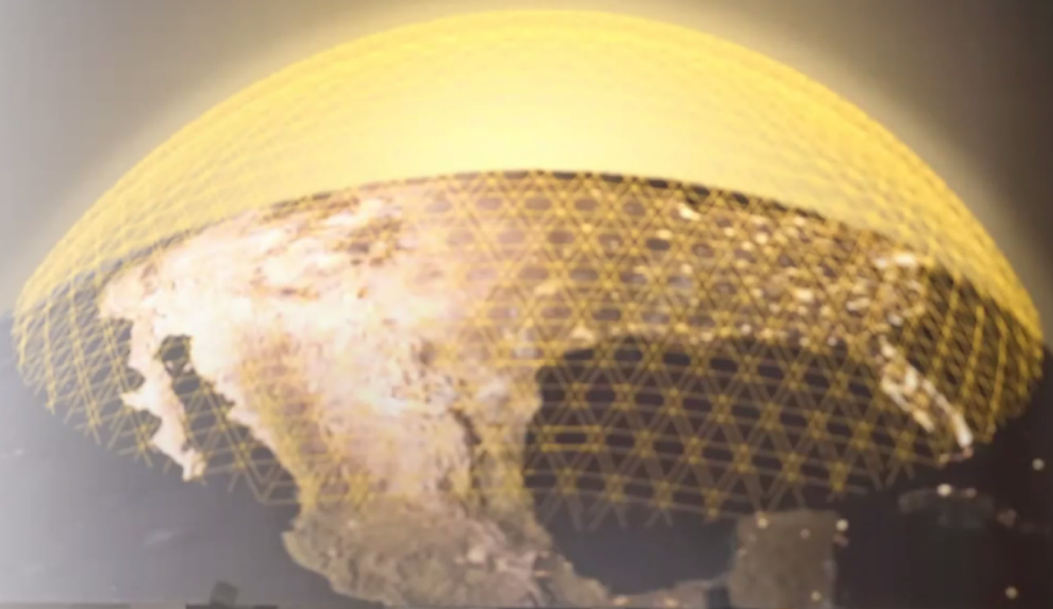


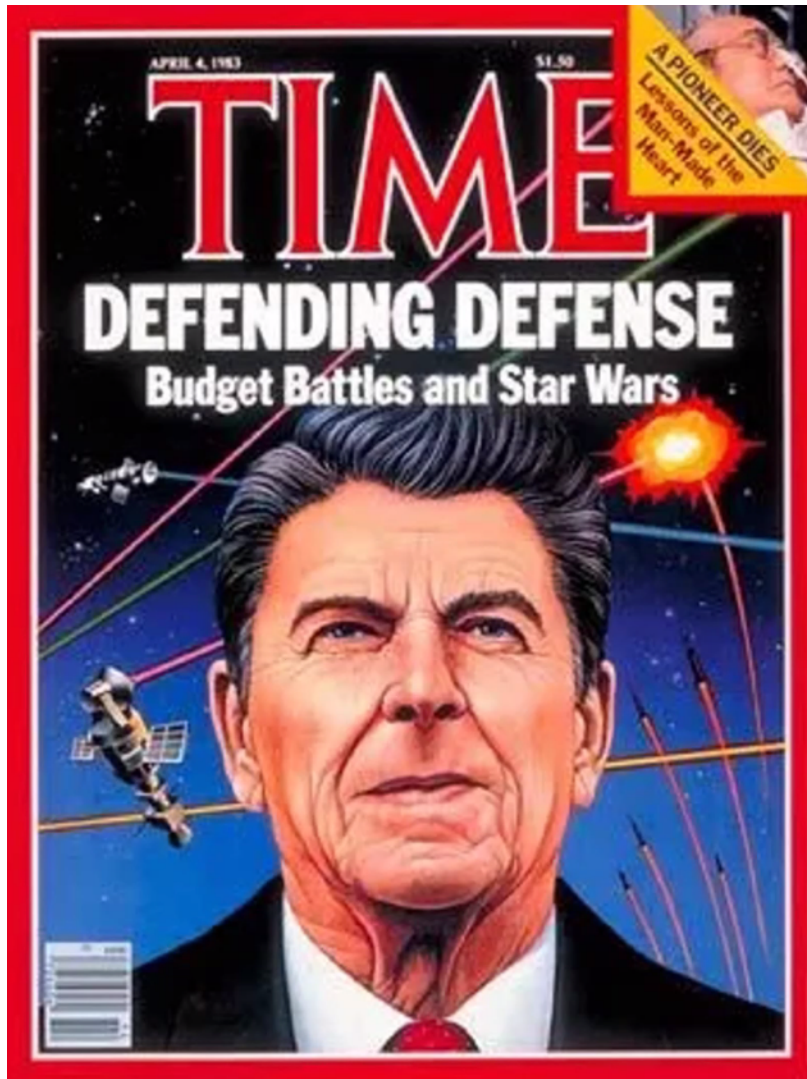
What is Golden Dome?

- **Executive Order 14186 (2025)**
- Aims to defeat **ICBMs, hypersonics, cruise missiles, drones**
- Intercepts at **boost, midcourse, and terminal** phases
- Space is the **critical enabler** of the entire architecture

**"This is a Very Dangerous World.
We're going to protect our citizens like never before!"**

-President Donald J. Trump





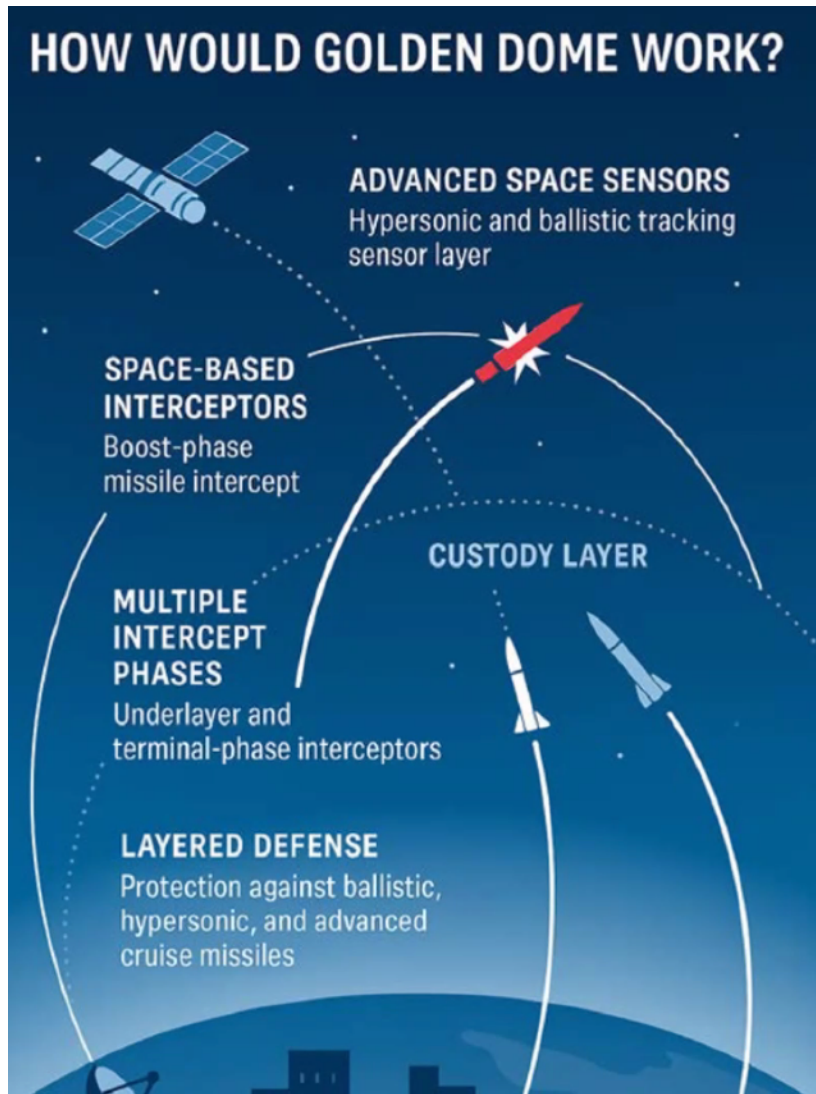
Historical Echo But Different Ambition

- Builds on **SDI-era concepts**: space-based interceptors, boost-phase defense, proliferated sensor networks.
- Draws on “**Brilliant Pebbles**” experiments: thousands of small satellites designed to intercept missiles in space.
- But: the **strategic logic** has shifted

Iron Dome Echo – But a Very Different Reality

- Different technology
- Different scale and geography
- Different threat set

Tactical ≠ Strategic — what works locally doesn't scale globally



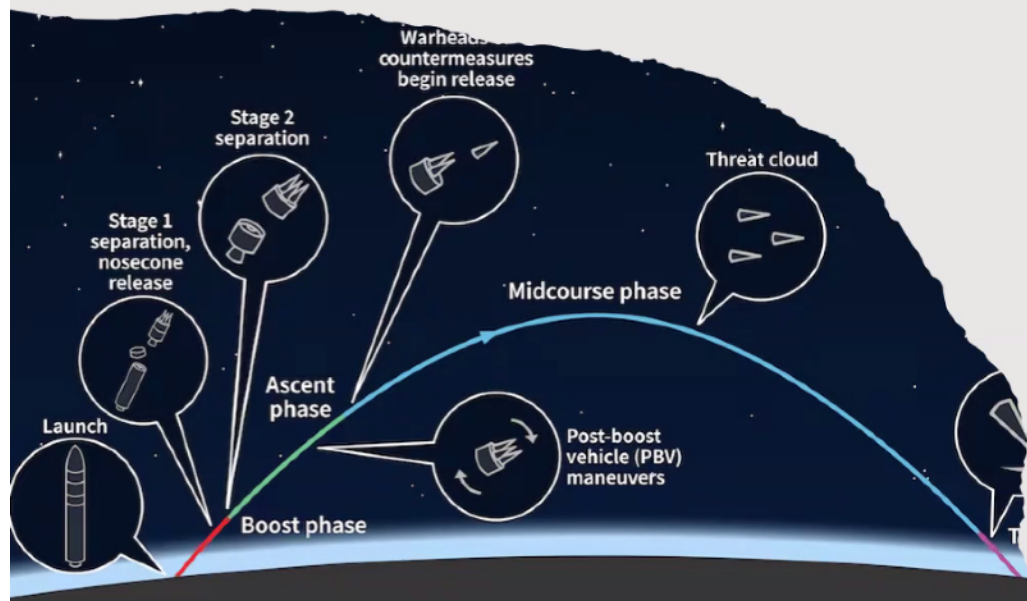
What's in the Box? – Still to be Determined

Architecture remains unclear but basic components include:

- **Detection & Tracking** – Space sensors, custody layer
- **Interceptors** – Space-based (boost), ground/sea (midcourse & terminal)
- **Support** – Non-kinetic tools, command & control, supply chain

Golden Dome isn't a single system: it's a wish list of capabilities.

Boost Phase: A Decades Long Dream



- Boost phase: missile is **bright, slow, and intact** — the “sweet spot”
- Only **space-based interceptors** can reach targets in time
- Would require **thousands of weapons** in orbit for global coverage
- No system like this has **ever been deployed**

Obstacles: Physics, Scale, and Costs

- ~**650–1,600** interceptors needed for Iran/North Korea
- >**5,000** for global coverage (Russia & China ~12× larger)
- “Cheaper launch” ≠ cheap weapons: interceptors must **survive re-entry & deliver kinetic force**
- Logistics, replenishment, and defence of the constellation unsolved



Beyond Defence: Dual-use and Escalation

- Interceptors can **double as anti-satellite weapons**
- Blurs line between **defensive and offensive** space capabilities
- Adversaries will see a **space weapon system**, not missile defence
- Risks **arms racing, debris creation, and norm erosion**



Industry Momentum

- **Commercial pressure:** Contractors and startups see a trillion-dollar market in space-based defence.
- **Venture capital:** Private investment is fuelling interceptor, sensor, and AI development.
- **Tech demos:** “Proof-of-concept” missions risk becoming **de facto weapons tests**.
- **Dual-use systems:** Commercial space assets are being designed with defence roles in mind.
- **Policy lag:** Industrial momentum may outpace diplomacy, governance, and strategic debate.



Ambition ≠ Achievability

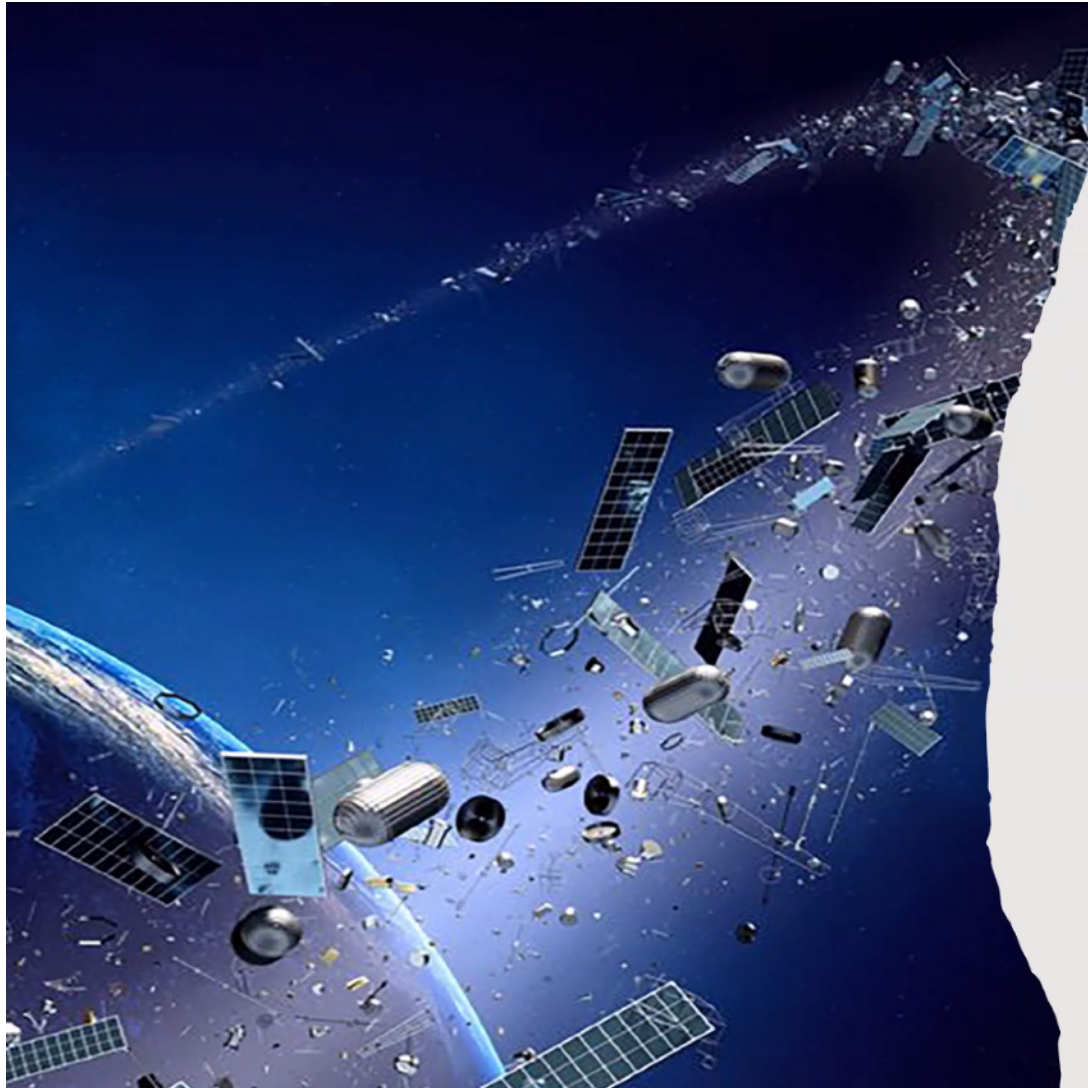
“Not impossible” ≠ **operationally feasible or strategically sound**

Physics, scale, and cost barriers remain overwhelming

Offence can **adapt faster and cheaper** than defence

History: every major space-interceptor program has **failed**





Why this Matters? A Strategic Turning Point

- **Strategic order:** Golden Dome aims to reshape deterrence, doctrine, and the balance of power.
- **Great-power rivalry:** It risks locking states into deeper competition and accelerating arms racing.
- **Weapons in orbit:** Deploying interceptors would cross a historic threshold with global consequences.
- **Alliance pressures:** Partners will face tough choices on participation, cost, and alignment with a strategy they don't control.
- **Civilian harm:** Escalation or debris in orbit could disrupt satellites that support communications, navigation, finance, and daily life.

THE AEROSPACE CORPORATION



FY 2026 Defense Space Budget

***Sam Wilson
Center for Space Policy & Strategy
The Aerospace Corporation***

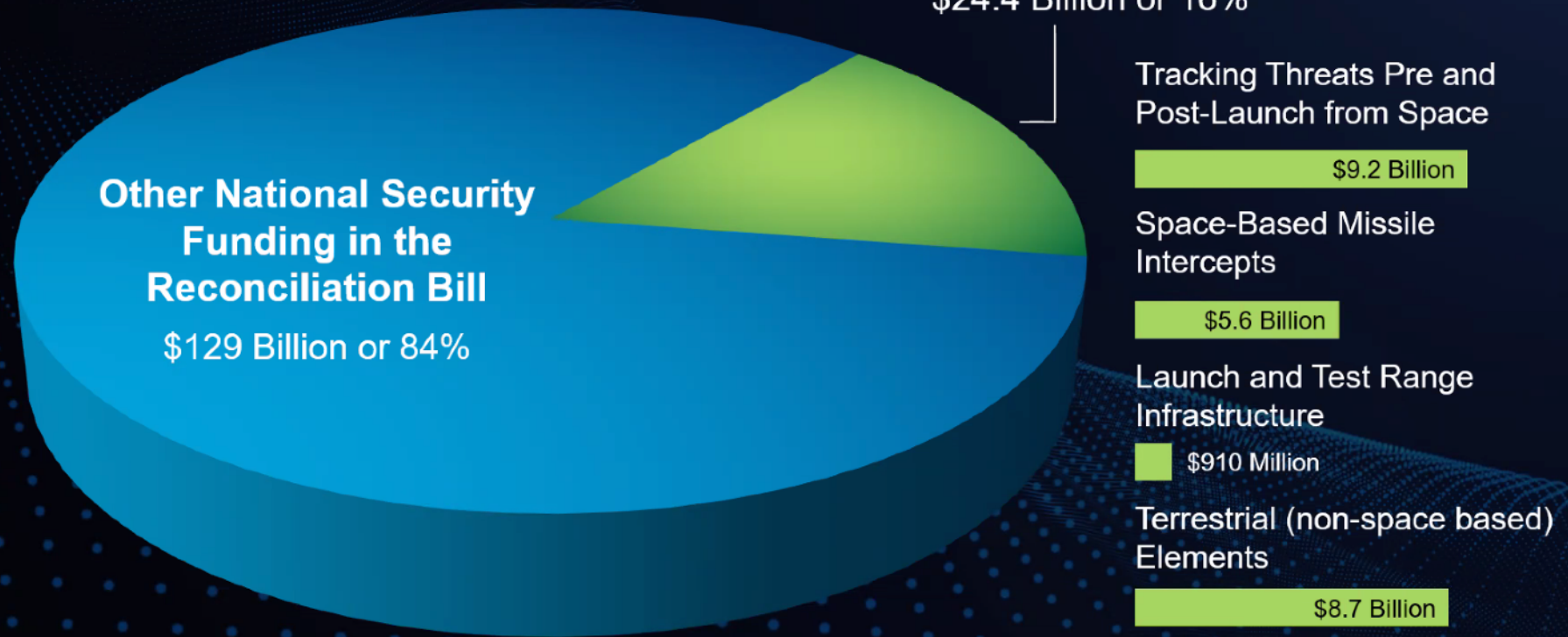
September 2025

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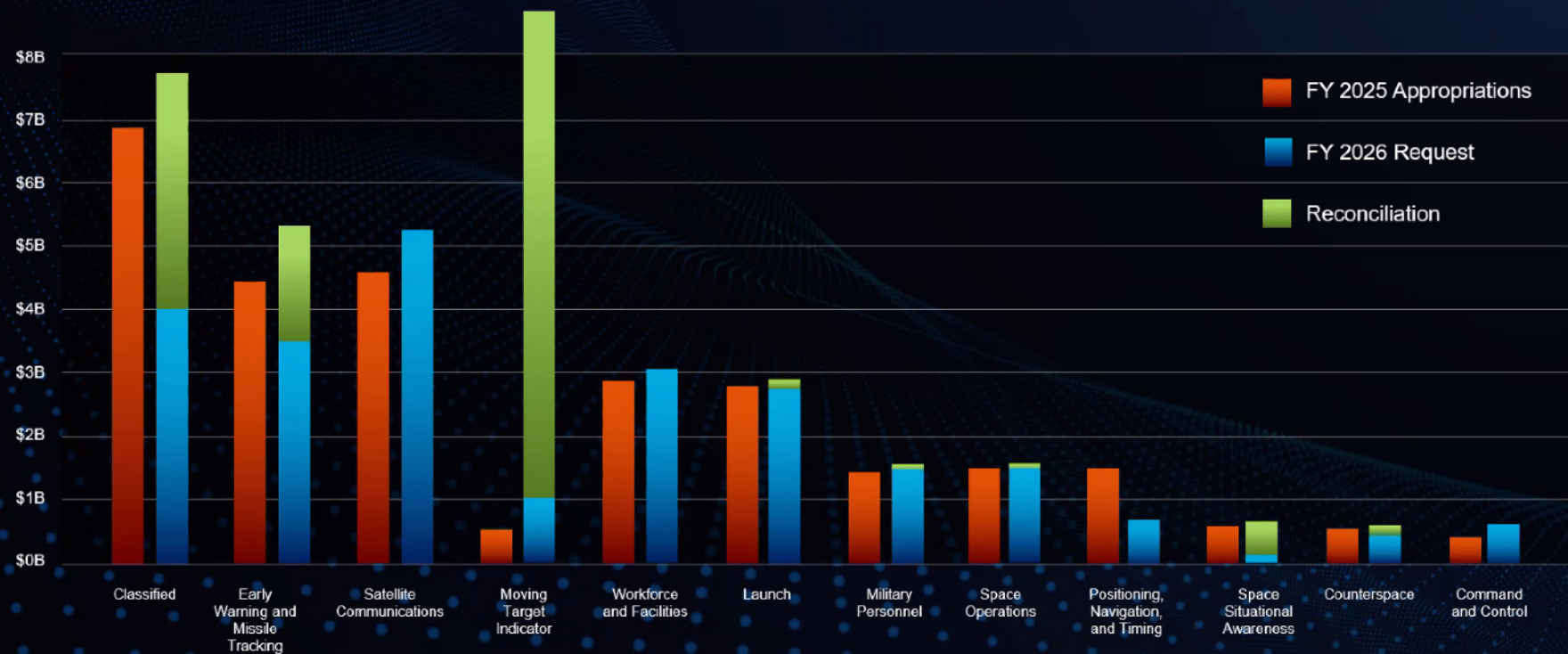
Reconciliation Act

Funding for Golden Dome





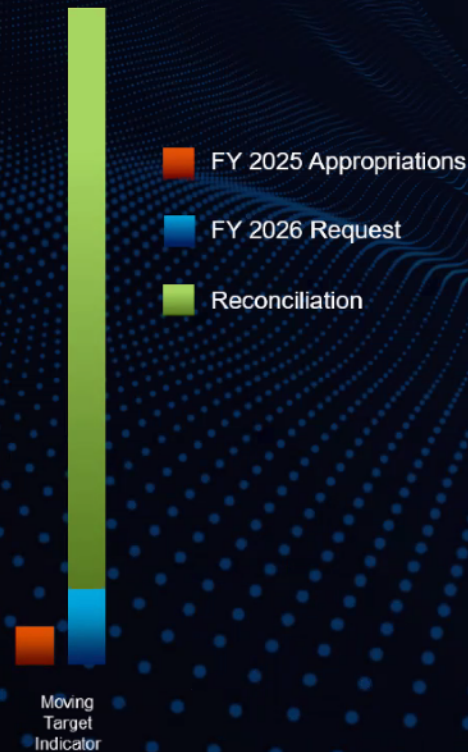
Budget Distribution by Mission Area, Across FY 2025 and FY 2026





Reconciliation Act

Moving Target Indicators



- This category of programs would grow from \$500 million in FY 2025 to \$8.8 billion, based on the requested and planned totals for FY 2026
- Ground-moving-target-indicator satellite program aims to provide “actionable intelligence on adversary surface targets,” a mission that E-8C Joint Surveillance Target Attack Radar Systems (JSTARS) aircraft had performed from 1991 to 2023
- Since the 1970s, the Air Force has used crewed E-3 Sentry aircraft to identify, detect, and track airborne and maritime threats. These aircraft were to be replaced with the E-7 Wedgetail aircraft; however, the FY 2026 request cancelled the E-7 program