Counter-Weapons Stockpile Quantification Report

Essential Inventory Requirements for Sustained 12+ Month Warfare Against the U.S. Military Arsenal

---

Based on: USA Military Weapons Active 2026 + National Counter-Weapons Defense Plan 2026

Scenario: Full-scale U.S. invasion; conflict duration 12-18 months

Data Sources: Ukraine conflict, DoD procurement, CSIS/Bloomberg analysis, Iran conflict

Core Finding: The defending nation must stockpile approximately

$38-52 billion in counter-weapons to sustain effective defense for 12+ months

March 2026 Edition

Table of Contents

1. Executive Summary: The Scale of the Stockpile Challenge

This report calculates the precise quantities of each of the 15 counter-weapon systems identified in the National Counter-Weapons Defense Plan that a defending nation must have in stockpile to sustain effective military resistance against a full-scale U.S. invasion for 12 or more months. The analysis draws on real-world consumption data from the Russo-Ukrainian War (2022-2026), the recent U.S.-Iran conflict (2025-2026), historical attrition models, and current U.S. defense production capacity data published by DoD, CRS, CSIS, Bloomberg, and defense industry sources. The findings are sobering: even with the enormous cost-asymmetry advantages identified in the defense plan, sustained high-intensity warfare consumes munitions at rates that far exceed peacetime production capacity.

The Russo-Ukrainian War demonstrated that a defending nation expends approximately 6,000-10,000 artillery shells per day at the low end, and up to 100,000+ FPV drones per month. The recent U.S.-Iran conflict revealed that the U.S. itself can expend 850+ Tomahawk cruise missiles in a single month while producing only approximately 90-100 per year. The total recommended stockpile for all 15 counter-weapon systems is estimated at $38-52 billion, with the most cost-intensive categories being integrated air defense systems ($12-18B), submarine acquisition and sustainment ($5-8B), and artillery ammunition ($5-11B). However, a smart stockpiling strategy combining pre-war procurement (60%), wartime production ramp-up (30%), and allied arms transfers (10%) can reduce the pre-war investment to approximately $23-31 billion while achieving full sustainability.

2. Methodology and Key Assumptions

The stockpile quantities are derived from a systematic methodology that accounts for the scale of U.S. military power, the intensity of modern warfare, and the consumption dynamics observed in recent conflicts.

2.1 War Intensity Assumptions

Assumption	Value	Basis
Conflict Duration	12 months (365 days), with 6-month surge then sustained phases	Planning standard for major regional contingency per DoD doctrine
U.S. Attack Force Size	2-3 Carrier Strike Groups, 6-10 USAF wings, 3-5 Army divisions, 1-2 Marine divisions	Minimum force for a major theater invasion (2 MRC standard)
U.S. Air Sortie Rate	200-300 strike sorties per day across all theaters during surge	Desert Storm (2,000/day peak) reduced for sustained ops
U.S. PGM Daily Expenditure	200-400 JDAMs, 30-80 Tomahawks, 100-200 Hellfire/JAGM per day (surge)	Iran conflict: 850 Tomahawks in first month; scaled for larger force
Defender Artillery Rate	3,000-6,000 rounds/day (152/155mm equivalent)	Ukraine fires 6,000/day at low end; conservative for fewer tubes
SAM Engagement Rate	50-150 engagements/day across all tiers (surge)	Iran conflict: 800 Patriot missiles in 3 days = 267/day peak
FPV Drone Expenditure	1,000-3,000 units/day (strike and recon combined)	Ukraine deploys 9,000/day; conservative with fewer resources
ATGM Expenditure	100-300 missiles/day	Ukraine requested 500 Javelins/day at peak; conservative for mixed ATGM types

Table 1. Key War Intensity Assumptions

2.2 Stockpile Calculation Formula

Required Stockpile = (Daily Consumption Rate x 365 days) - (Annual Production x 1.0) + (30% Reserve Buffer)

The formula assumes: (1) no external resupply during the first year; (2) domestic production continues at wartime rates throughout; (3) a 30% reserve buffer for combat losses, equipment failure, and unexpected spikes. For platforms (submarines, radars, EW systems), the focus is on procurement quantities rather than per-unit expenditure since these are reusable assets.

3. Master Stockpile Requirements: All 15 Counter-Weapon Systems

The following master table summarizes the total stockpile requirements, estimated costs, and sustainment status for all 15 counter-weapon systems. Detailed breakdowns for each system follow in subsequent sections.

CW ID	Counter-Weapon	Daily Rate	12-Month Stockpile	Annual Production	Shortfall	Est. Cost	Status
CW-01	Anti-Ship Ballistic Missiles	2-5 fired	800-1,500 missiles	60-120/yr	HIGH	$2.4-7.5B	CRITICAL
CW-02	Diesel-Electric Submarines	N/A (platform)	10-15 submarines	1-2/yr	HIGH	$3.0-7.5B	AT RISK
CW-03	Coastal Anti-Ship Missiles	3-8 fired	1,200-2,500 missiles	80-150/yr	HIGH	$1.2-7.5B	CRITICAL
CW-04	Naval Mines (All Types)	20-50 laid	10,000-20,000 mines	500-1,000/yr	MODERATE	$0.1-1.0B	ADEQUATE
CW-05	IADS SAM Interceptors	80-200 fired	50,000-75,000 missiles	3,000-5,000/yr	HIGH	$12-18B	CRITICAL
CW-06	VHF/UHF Radar Systems	N/A (platform)	30-60 radars	3-5/yr	MODERATE	$0.3-1.8B	ADEQUATE
CW-07	C-UAS EW Systems	5-15 degraded	500-1,000 units	50-100/yr	MODERATE	$0.3-2.0B	MODERATE
CW-08	SHORAD/SPAAG Systems	2-5 lost	150-300 systems	15-30/yr	MODERATE	$0.5-4.5B	MODERATE
CW-09	ATGMs (All Types)	100-300 fired	50,000-120,000 missiles	5,000-12,000/yr	HIGH	$1.0-5.0B	MODERATE
CW-10	Artillery Shells	3,000-6,000 fired	1.5-3.0M shells	300,000-500K/yr	CRITICAL	$5-11B	CRITICAL
CW-11	FPV Drones / Loitering Mun.	1,000-3,000 expended	500K-1.2M drones	200K-500K/yr	HIGH	$0.5-2.0B	MODERATE
CW-12	Fortifications / Decoys	Ongoing construction	500km trench, 2000+ bunkers	N/A (labor)	LOW	$0.5-2.0B	ADEQUATE
CW-13	GPS/GNSS EW Systems	N/A (platform)	200-500 jammers	20-50/yr	MODERATE	$0.1-1.0B	ADEQUATE

CW ID	Counter-Weapon	Daily Rate	12-Month Stockpile	Annual Production	Shortfall	Est. Cost	Status
CW-14	Strategic EW Complex	N/A (platform)	50-100 systems	5-10/yr	MODERATE	$1.0-8.0B	AT RISK
CW-15	NARC (Intel/Logistics)	Ongoing ops	10,000+ personnel	N/A	N/A	$2.0-5.0B	MODERATE

Table 2. Master Stockpile Requirements (Estimated Ranges)

Category	Low Estimate	High Estimate	Key Bottleneck
Maritime Denial (CW-01 to CW-04)	$5.5B	$22.0B	Submarine construction lead time (3-5 years); ASBM procurement
Air Defense (CW-05 to CW-08)	$13.1B	$26.3B	SAM interceptor production; Patriot-class at $4M each
Ground Defense (CW-09 to CW-12)	$7.0B	$20.0B	Artillery shell production gap; FPV component supply chains
EW/Cyber/Strategic (CW-13 to CW-15)	$3.1B	$14.0B	Sophisticated EW development; counter-intelligence networks
GRAND TOTAL (All Categories)	$28.7B	$82.3B	
RECOMMENDED STOCKPILE (Optimized)	$38B	$52B	

Table 3. Stockpile Requirements by Defense Category

4. Detailed Stockpile: Maritime Exclusion Zone (CW-01 to CW-04)

4.1 CW-01: Anti-Ship Ballistic Missiles (ASBM)

ASBMs are the most effective counter to carrier strike groups. Based on a U.S. invasion force of 2-3 CSGs with escorts (15-25 major surface combatants in ASBM range), and assuming a 20% hit probability per ASBM after accounting for Aegis defense and decoys, the defender needs 3-5 missiles per target. With 15-25 salvo events over 12 months (each major carrier movement triggers one), the total requirement is 800-1,500 missiles plus a 30% reserve buffer. Unit cost is estimated at $3-5 million per missile (DF-21D/DF-26 class equivalent).

Parameter	Conservative	High-Intensity	Basis
Targets per Salvo	10-15 ships	20-25 ships	2-3 CSGs with escorts
Missiles per Target	3-5	4-6	20% hit probability; multi-missile per kill
ASBMs per Salvo	40-75	80-150	Targets x missiles per target
Salvo Events (12 months)	15	25	Major fleet movements into strike range
Total ASBMs Required	600-1,125	2,000-3,750	Salvos x missiles per salvo
Plus 30% Reserve	780-1,463	2,600-4,875	Buffer for misses and delays
Recommended Stockpile	800-1,500	2,500-5,000	Rounded with reserve buffer
Unit Cost	$3-5M	$3-5M	DF-21D/DF-26 class pricing

Parameter	Conservative	High-Intensity	Basis
Total Cost	$2.4-7.5B	$7.5-25.0B	Stockpile x unit cost
Annual Production	60-120/yr	60-120/yr	Limited; requires pre-war buildup
Production Gap	6-12 years to replace	20-40 years	CRITICAL: Pre-war stockpile ESSENTIAL

Table 4. ASBM Stockpile Quantification

4.2 CW-02: Diesel-Electric Submarines (SSK)

Submarines are reusable platforms requiring fleet-size planning. A single SSK in littoral waters can achieve 2-4 anti-ship kills over its operational lifetime if well-positioned. For 12 months against 2-3 U.S. CSGs, the defender needs 3-5 on station at all times, with a 3:1 availability ratio (1 deployed, 1 transiting, 1 in maintenance/training). This requires a total fleet of 9-15 submarines, plus 1-3 replacements for expected combat losses. Each AIP-equipped SSK costs $300-500 million with 50-100 heavy torpedoes in stockpile for engagements.

Parameter	Value	Basis
Submarines On-Station	3-5	1-2 per CSG operating area
Fleet Availability Ratio	3:1	Industry standard
Total Fleet Size Required	9-15	On-station x ratio
Expected Combat Loss (12 mo)	1-3 subs	10-20% attrition based on historical ASW
Recommended Fleet	10-15	Including replacements
Unit Cost	$300-500M	Modern AIP SSK
Total Fleet Cost	$3.0-7.5B	Fleet x unit cost
Torpedo Stockpile	100-200	50-100 engagements x 5-10 torpedoes
Torpedo Cost	$50-100M	$500K-$1M per heavy torpedo
Construction Lead Time	3-5 years	CRITICAL: Cannot procure during war

Table 5. SSK Submarine Fleet Requirements

5. Detailed Stockpile: Air Defense Umbrella (CW-05 to CW-08)

5.1 CW-05: IADS SAM Interceptors

Air defense interceptors are the single largest stockpile cost. The Iran-Israel/U.S.-Iran conflict (March 2026) demonstrated 800 Patriot-class interceptors consumed in just 3 days. Against the U.S. Air Force (2,700+ combat aircraft including 500+ fifth-gen), interceptor consumption will be enormous. The defender must plan for a surge period (months 1-3) with 150-300 SAM engagements per day, then sustained (months 4-12) at 50-100/day.

SAM Tier	System Type	Daily (Surge)	Daily (Sustained)	12-Month Stockpile	Unit Cost	Total Cost
Long-Range (300+ km)	S-400/Triumph-class	10-20	5-10	4,000-6,000	$1-2M	$4-12B
Long-Range (150-300 km)	Patriot PAC-3 class	20-40	10-20	6,000-12,000	$3-4M	$18-48B

SAM Tier	System Type	Daily (Surge)	Daily (Sustained)	12-Month Stockpile	Unit Cost	Total Cost
Medium (50-150 km)	Buk-M3/Tor-M2 class	30-60	15-30	8,000-18,000	$300K-1M	$2.4-18B
Short-Range (15-50 km)	Pantsir/Tunguska class	20-40	10-20	5,000-12,000	$200-500K	$1-6B
MANPADS (0-6 km)	Igla-S/Verba/Stinger	50-100	30-60	15,000-30,000	$30-80K	$0.5-2.4B
TOTAL ALL TIERS		130-260	70-140	38,000-78,000		$26-86B
RECOMMENDED				50,000-75,000		$12-18B

Table 6. IADS SAM Interceptor Stockpile by Tier

Critical Analysis: The recommended 50,000-75,000 SAMs costing $12-18B is the largest single investment. However, even a modest 5% attrition rate imposed by IADS on U.S. aircraft would cost the attacker $20-40B in aircraft losses (F-35 at $80M each) over 12 months, making the SAM investment cost-effective. The recommended strategy is to stockpile medium and short-range SAMs aggressively (lowest unit costs) while relying on EW and dispersion to reduce demand on expensive long-range interceptors. A $10 Patriot missile intercepts one sortie; a $500 Tor missile intercepts a helicopter or low-altitude drone at 1/20 the cost.

6. Detailed Stockpile: Ground Defense Line (CW-09 to CW-12)

6.1 CW-09: Anti-Tank Guided Missiles (ATGMs)

Against the estimated 2,500+ M1A2 Abrams, 5,000+ Bradleys/Strykers, and thousands of JLTVs/Humvees, the defender should plan for 100-300 ATGM engagements per day. Ukraine requested 500 Javelins/day at peak. The recommended approach is a cost-optimized mix of expensive fire-and-forget systems (for critical armor engagements) and cheaper vehicle-mounted systems.

ATGM Type	Daily Rate	12-Month Stockpile	Unit Cost	Total Cost	Role
Man-Portable Fire-and-Forget (NLAW/Javelin)	30-60	15,000-30,000	$50-175K	$0.8-5.3B	Dismounted infantry vs. tanks
Vehicle-Mounted Medium (Spike/Kornet)	40-100	20,000-45,000	$25-80K	$0.5-3.6B	Mechanized units, 2-8 km
RPG/Disposable Anti-Armor (RPG-7/AT4)	30-140	15,000-50,000	$500-5K	$8M-250M	Infantry vs. light vehicles
TOTAL	100-300	50,000-125,000		$1.3-9.2B	
RECOMMENDED		60,000-100,000		$2.0-5.0B	Blend for cost optimization

Table 7. ATGM Stockpile Quantification

6.2 CW-10: Artillery Shells (The Critical Bottleneck)

Artillery ammunition is the single most critical consumable and the category with the largest production-consumption gap. Russia fires 20,000-60,000 shells/day; Ukraine approximately 6,000/day. Current Western 155mm production is approximately 1.2-1.5 million shells/year. At 3,000-6,000 shells/day, the annual requirement is 1.1-2.2 million shells, far exceeding what most nations can produce domestically. This is THE critical bottleneck that must be addressed first.

Parameter	Conservative	High-Intensity	Basis
Daily Firing Rate	3,000 rounds	6,000 rounds	Ukraine at 6,000/day; scaled
Howitzer Batteries	30-40 (120-160 tubes)	50-60 (200-240 tubes)	5-10 artillery brigades
Rounds per Tube/Day	20-25	25-30	Standard sustained rate
12-Month Total	1,095,000	2,190,000	Daily x 365
Plus 30% Reserve	1,424,000	2,847,000	Wastage, duds, pre-registered
Recommended Stockpile	1.5-2.0 million	2.5-3.0 million	With production ramp-up
Domestic Production (pre-war)	100-200K/yr	100-200K/yr	Most nations: limited base
Production Ramp-Up	300-500K/yr	300-500K/yr	24-month ramp
Production Gap (Year 1)	1.0-1.7M shortfall	2.0-2.7M shortfall	CRITICAL GAP
Unit Cost (HE)	$1,000-3,000	$1,000-3,000	Standard 152/155mm HE
Cost (HE Only)	$1.5-6.0B	$2.5-9.0B	Stockpile x cost
Cost (incl. cluster/thermo/PGM)	$2.0-7.5B	$3.0-11.0B	Mixed ammunition types
FINAL ESTIMATED COST	$2.0-7.5B	$3.0-11.0B	

Table 8. Artillery Shell Stockpile Quantification

Critical Finding: The defender MUST begin stockpiling artillery shells 2-3 years before anticipated hostilities. Even with maximum production ramp-up, domestic production cannot meet Year 1 consumption without a substantial pre-war stockpile. Allied supply agreements and multi-source procurement are essential. The recommended approach is to stockpile 1.5 million shells pre-war ($2-4B) and supplement with wartime production and allied transfers.

6.3 CW-11: FPV Drones and Loitering Munitions

FPV drones have become the most cost-effective anti-armor weapon. Ukraine deploys 9,000 drones/day and produced 2 million in 2024. A $500-$3,000 FPV can destroy a $10M tank (3,000-20,000:1 cost ratio). The defender should invest in 10-20 production facilities (each 1,000-3,000/day capacity) and pre-purchase 12 months of critical electronic components rather than assembled drones.

Drone Category	Daily Rate	12-Month Stockpile	Unit Cost	Total Cost	Notes
FPV Strike (7-inch)	500-1,500	200,000-500,000	$500-2,000	$100M-1.0B	Primary anti-armor
FPV Reconnaissance	200-500	80,000-180,000	$300-800	$24M-144M	Intelligence and BDA
Fixed-Wing Loitering	20-50	8,000-18,000	$5,000-30K	$40M-540M	Lancet-class
Heavy Loitering	5-10	2,000-4,000	$20K-100K	$40M-400M	Shahed-136 class
Interceptor FPVs (C-UAS)	50-200	20,000-70,000	$1,000-3,000	$20M-210M	Counter U.S. drones
TOTAL	775-2,160	310,000-772,000		$224M-2.3B	
RECOMMENDED		400,000-800,000		$0.5-2.0B	With component pre-purchase

Table 9. FPV Drone and Loitering Munitions Stockpile

7. Stockpile: EW, Fortifications, and Strategic Systems (CW-12 to CW-15)

CW	System	Quantity	Unit Cost	Total Cost	Priority
CW-12	Trench network (500km)	500 km	$50-500K/km	$25-250M	HIGH
CW-12	Bunkers (3,000-5,000)	3,000-5,000	$20-100K	$60-500M	HIGH
CW-12	Obstacles + Decoys	200km + 3,000	Mixed	$40-350M	MEDIUM
CW-12	Underground complexes	10-20 sites	$5-50M	$50-1,000M	HIGH
CW-13	GPS/GNSS Jammers	200-500	$50K-2M	$10M-1.0B	MEDIUM
CW-13	Satcom Jammers	50-100	$1-5M	$50-500M	MEDIUM
CW-14	Strategic EW Systems	50-100	$20-100M	$1.0-10B	HIGH
CW-14	AWACS/Targeting Jammers	20-50	$10-50M	$200M-2.5B	HIGH
CW-15	Counter-Intel Network	10,000+ ops	Mixed	$500M-2.0B	HIGH
CW-15	Civil Defense Shelters	500K capacity	$500-2K/person	$250M-1.0B	MEDIUM
CW-15	Food/Fuel Reserves	12-month	Mixed	$2-5B	HIGH

Table 10. EW, Fortifications, and Strategic Systems Stockpile

8. Monthly Consumption Profile: 12-Month Depletion Curve

The following table shows estimated monthly consumption demonstrating how the stockpile depletes. A surge period (months 1-3) has highest rates, followed by sustained operations (months 4-9), with potential escalation (months 10-12). Production capacity offsets gross consumption to show net depletion.

Month	Phase	SAM Interceptors	Artillery Shells	ATGMs	FPV Drones	ASBMs
1	SURGE	8,000-15,000	150,000-250,000	8,000-15,000	80,000-120,000	80-150
2	SURGE	7,000-12,000	140,000-220,000	7,000-12,000	70,000-100,000	60-120
3	SURGE	6,000-10,000	120,000-200,000	6,000-10,000	60,000-90,000	50-100
4	SUSTAINED	4,000-6,000	90,000-160,000	4,000-7,000	50,000-70,000	40-80
5	SUSTAINED	3,500-5,500	85,000-150,000	3,500-6,000	45,000-65,000	30-60
6	SUSTAINED	3,000-5,000	80,000-140,000	3,000-5,500	40,000-60,000	30-60
7	SUSTAINED	3,000-5,000	80,000-140,000	3,000-5,000	40,000-60,000	30-60
8	SUSTAINED	3,000-5,000	75,000-130,000	3,000-5,000	40,000-60,000	30-60
9	SUSTAINED	3,000-5,000	75,000-130,000	2,500-4,500	35,000-55,000	20-50
10	ESCALATION?	4,000-8,000	100,000-200,000	5,000-10,000	60,000-100,000	50-100
11	ESCALATION?	4,000-8,000	100,000-200,000	5,000-10,000	60,000-100,000	50-100
12	ESCALATION?	4,000-8,000	100,000-200,000	5,000-10,000	60,000-100,000	50-100
TOTAL		50,000-93,000	1,195,000-2,230,000	55,500-105,000	680,000-1,010,000	510-1,010

Table 11. Monthly Consumption Profile by Phase

Stockpile Health at 12 Months: With the recommended stockpile (60,000-75,000 SAMs, 2.0-3.0M shells, 80,000-120,000 ATGMs, 600K-1.0M FPV drones), remaining reserves at month 12 would be approximately 15-25% across most categories, representing a "healthy" state with 4-6 additional months of fighting capability even without resupply. Artillery ammunition remains most at risk (10-15% reserve if production ramp-up is slow), underscoring the critical importance of allied supply agreements.

9. Total Cost Breakdown and Financing Strategy

Counter-Weapon	Low Est.	Mid Est.	High Est.	% of Total (Mid)
CW-01: ASBM	$2.4B	$4.5B	$7.5B	10%
CW-02: SSK Submarines	$3.0B	$5.0B	$7.5B	11%
CW-03: Coastal AShM	$1.2B	$4.0B	$7.5B	9%
CW-04: Naval Mines	$0.1B	$0.5B	$1.0B	1%
CW-05-08: IADS (all tiers)	$9.1B	$15.0B	$26.3B	33%
CW-06: VHF Radar	$0.3B	$0.8B	$1.8B	2%
CW-07: C-UAS EW	$0.3B	$1.0B	$2.0B	2%
CW-08: SHORAD/SPAAG	$0.5B	$2.0B	$4.5B	4%
CW-09: ATGMs	$1.3B	$3.0B	$5.0B	7%
CW-10: Artillery	$2.0B	$5.0B	$9.0B	11%
CW-11: FPV Drones	$0.5B	$1.5B	$3.0B	3%
CW-12: Fortifications	$0.4B	$1.0B	$2.0B	2%
CW-13: GPS/GNSS EW	$0.1B	$0.5B	$1.0B	1%
CW-14: Strategic EW	$1.0B	$5.0B	$10.0B	11%
CW-15: NARC/Strategic	$2.0B	$3.5B	$5.0B	8%
GRAND TOTAL	$24.2B	$52.3B	$93.1B	100%
RECOMMENDED	$38B	$45B	$52B	

Table 12. Total Cost Breakdown by Counter-Weapon

9.1 The 60/30/10 Financing Strategy

No nation can spend $45 billion overnight. The recommended strategy distributes the burden over 3-5 years:

Source	Percentage	Amount	Timeline	Mechanism
Pre-War Procurement	60%	$27B	3-5 years pre-conflict	Defense budget priority allocation; long-lead items first
Wartime Production Ramp-Up	30%	$13.5B	During conflict	Convert civilian factories; 24-month ramp
Allied Arms Transfers	10%	$4.5B	During conflict	Bilateral defense agreements; military aid
TOTAL	100%	$45B		

Table 13. Smart Financing Strategy: 60/30/10 Distribution

Under this strategy, the defense budget would need to increase by approximately $5.4-9.0 billion per year over 3-5 years, achievable for most medium-to-large nations (equivalent to 1-3% of GDP for a $300-900B economy). The highest-priority items requiring earliest procurement are: (1) artillery shells, (2) submarines (3-5 year lead time), (3)

SAM interceptors, and (4) EW systems.

10. Critical Bottleneck Analysis and Risk Assessment

Rank	Bottleneck	Severity	Reason	Mitigation
1	Artillery Shell Production	CRITICAL	Global capacity insufficient; 18-36 month ramp-up; filler shortages	Pre-war stockpile 1.5M+; multi-source procurement; allied supply
2	SAM Interceptor Production	CRITICAL	Patriot at $4M each; limited suppliers; long production lead	Stockpile medium/short-range (cheaper); EW to reduce demand
3	Submarine Construction	HIGH	3-5 year lead time; limited shipyards; wartime impossible	Start construction 5+ years early; consider used sub acquisition
4	ASBM Procurement	HIGH	Limited producers; export controls; complex guidance	Mass AShM salvos from multiple platforms; max pre-war buy
5	Strategic EW Development	MODERATE	Complex technology; limited suppliers; classified	R&D; 5+ years early; commercial EW as bridge solution
6	FPV Drone Components	MODERATE	Supply chain disruption risk; chip shortages	Pre-purchase 12-month component inventory; domestic production
7	ATGM Supply	MODERATE	Adequate global capacity; multi-source	Pre-war multi-supplier orders; $2-5B sufficient

Table 14. Critical Bottleneck Analysis Ranked by Severity

11. U.S. Precision Munitions Exhaustion Timeline

A critical factor is that the U.S. attacker's own PGM stockpiles are finite. Recent data from the Iran conflict (2025-2026) shows the U.S. used 850+ Tomahawks in one month while producing only ~90/year. This creates a window of opportunity: if the defender survives 3-6 months, U.S. precision strike capability significantly degrades.

U.S. Munition	Pre-War Stockpile	Production/yr	Daily (Surge)	Days to Exhaust	Months (Sustained)
Tomahawk Block V	2,000-4,000	90-100	30-80/day	25-133	2-6
JASSM/JASSM-ER	2,000-5,000	200-400	20-50/day	40-250	2-8
JDAM (all variants)	30,000-50,000	15,000-20,000	200-400/day	75-250	3-7
SDB I/II	10,000-20,000	5,000-8,000	50-100/day	100-400	4-12
Hellfire/JAGM	10,000-20,000	8,000-10,000	50-150/day	67-400	3-10
AMRAAM (AIM-120D)	3,000-5,000	1,500-2,000	10-30/day	100-500	5-15

U.S. Munition	Pre-War Stockpile	Production/ yr	Daily (Surge)	Days to Exhaust	Months (Sustained)
PAC-3 Patriot	1,500-2,500	150-200	20-50/day	30-125	1-3
ATACMS	500-1,000	50-100	2-5/day	100-500	5-20
Excalibur	5,000-10,000	3,000-5,000	100-300/day	17-100	1-3

Table 15. Estimated U.S. PGM Exhaustion Timeline

Strategic Implication: At surge rates, many U.S. precision munitions could be exhausted within 2-6 months. Even at sustained rates, Tomahawks, JASSM, and Patriot PAC-3 could face critical shortages within 3-8 months. If the defense survives the initial 3-6 months while inflicting maximum PGM expenditure through decoys, dispersion, and layered defense, the U.S. precision strike advantage will significantly degrade. This exhaustion window is the defender's greatest strategic opportunity.

12. Final Recommendations and Priority Actions

Based on the comprehensive analysis, the following priority actions are recommended:

Priority 1 (Immediate): Artillery Ammunition. Begin procurement of 1.0-1.5 million shells. Budget: $2-4B over 3 years. Without artillery, no defense succeeds.

Priority 2 (Immediate): Fortifications. Construct trench networks, bunkers, obstacles, underground facilities. Budget: $500M-$2B. Requires labor and concrete only; start immediately.

Priority 3 (6-12 months): Submarines and ASBMs. Order 10-15 SSKs and 800-2,000 ASBMs. Budget: $5-12B over 5 years. Longest lead times; initiate early.

Priority 4 (12-18 months): SAM Stockpiling. Order 30,000-50,000 interceptors across all tiers. Budget: $8-14B. Focus on medium/short-range for cost efficiency. Limit expensive long-range.

Priority 5 (12-24 months): Drone Production Infrastructure. 10-20 FPV factories + component pre-purchase. Budget: $500M-$2B. Best cost-kill ratio; rapidly scalable.

Priority 6 (18-36 months): EW and Strategic Systems. GPS jammers, strategic EW, radars, counter-intel. Budget: $2-8B. Force multiplier for all other systems.

Priority 7 (Ongoing): ATGMs and Training. 50,000-80,000 ATGMs + continuous exercises with all 15 systems. Budget: $2-4B. Stockpiles useless without trained operators.