

PRODUCTION IS DETERRENCE:
A FACT SHEET ON WESTERN ASSISTANCE TO UKRAINE AND DEFENSE INDUSTRIAL
PRODUCTION, INCLUDING ARTILLERY ROUNDS AND AIR DEFENSE SYSTEMS
APRIL 22, 2024

ALLEGATIONS:

- The Ukraine war consumes far more materiel than the United States can produce under any plausible scenario over the coming years.
- The U.S. cannot produce enough PAC-3 interceptors or 155mm shells to simultaneously meet all possible requirements.
- U.S. defense production capacity can't increase enough to compensate for weapons transfers in the near term.
- U.S. munitions stockpiles are extremely low across the board to the point that many national security officials consider seriously concerning.

FACT: The U.S. defense industrial base does not need to meet Ukraine's security requirements alone because more than 20 other countries are supporting Ukraine.

- Other countries have obligated more security assistance than the United States - \$44.9 billion to \$44.2 billion. (Source: DOD, April 8).
- As of November 2023, countries other than the United States were responsible for donating about 70% of the artillery platforms and more than 80% of the mid-to-long range air defense systems to Ukraine.
- Twenty-one other countries have donated hundreds of thousands of 155mm artillery rounds.

FACT: Ukraine's indigenous capacity is also growing, especially in [drone production](#), [howitzers](#), and eventually significant amounts of [155mm shells](#).

ARTILLERY ROUNDS

- **FACT: The supplemental is the most important opportunity Congress has this year to increase U.S. domestic production of artillery rounds for the U.S. military.**
 - \$5.3 billion in the supplemental supports the Army's plan to expand production to 1 million rounds per year by the end of 2025, up from 360,000 per year.
 - Had the supplemental passed in September, the Army would be on schedule to produce 1 million rounds per year by 4th quarter FY25. This target has slipped by at least three months.

- **FACT: Europe is already producing more 155mm artillery rounds than the United States, and it is on path to produce twice as many artillery rounds as the United States.**
 - Europe already produces over [half a million](#) 155mm rounds per year, and Europe is scheduled to hit [1.4 million](#) rounds per year by the end of 2024.
 - Europe's [plan](#) is to ramp to 2 million 155mm shells per year by the end of 2025.
 - Between the United States and Europe, annual 155 artillery round production will exceed 3 million rounds by the end of 2025.
 - Europe has also identified 800,000 rounds from non-public countries [outside Europe, which European firms will refurbish](#). Czech Prime Minister Petr Fiala has [announced](#) that the coalition has secured 500,000 rounds with the possibility of delivering 1.5 million rounds by April 2025.
 - NAMMO in Norway [started running](#) 24-hour shifts at its 155mm production facility, which accounts for 20-25% of all European production.
 - Countries outside of Europe have also donated very significant amounts of 155mm outside of the new Czech initiative, but do not wish to be identified publicly.
- **FACT: Non-traditional 155mm artillery rounds and other types of artillery rounds contribute significantly to U.S. and Ukraine's artillery inventories.**
 - The U.S. has massive stockpiles of 155mm dual purpose (DPICM) artillery (cluster munitions) that the United States has begun to transfer to Ukraine. One DPICM round can replace four to five traditional 155mm high explosive rounds. That has obviated the need for millions of rounds of regular 155mm rounds.
 - Ukraine is in the midst of increasing its own 122/152mm production with Rheinmetall.
 - Many European countries have made non-public donations of very significant amounts of 122mm and 152mm rounds to Ukraine as well.

AIR DEFENSE

- **FACT: The supplemental is the most important opportunity Congress has this year to increase U.S. domestic production of anti-air capabilities for the U.S. military.**
 - Includes \$755 million to increase Patriot production capacity by nearly 20%.
 - Includes \$600 million for lower-cost, high-production counter-drone missiles such as the Coyote and Roadrunner.
 - Includes \$157 million to refurbish 354 Navy surface to air Standard Missiles.
 - Includes \$50 million to replenish Navy Rolling Airframe Missiles.
- **FACT: Other countries are manufacturing and donating Patriot missiles besides the United States.**
 - There are two variants of the Patriot missile, both of which are effective. These are the PAC-2 and the PAC-3.
 - NATO countries have donated significant numbers of Patriot interceptors. Germany, Romania, Spain, and the Dutch have joined together to procure 1,000 Patriot PAC-2 missiles with a new production line in Germany.

- Japan has a license to [produce](#) PAC-2 and PAC-3 missiles through Mitsubishi and has [offered](#) to transfer missiles to replenish U.S. stockpiles.
- Five countries have agreements to produce components of Patriot missiles.
- **FACT: There are numerous other air defense interceptor capabilities other than Patriot that meet Ukrainian or U.S. requirements with healthy stockpiles.**
 - European allies have donated hundreds of rounds [each](#) of [IRIS-T/SAMP-T](#) and [NASAMS launchers](#)/interceptors, and the U.S. has donated [refurbished](#) HAWK missiles.
 - In many cases, .50 caliber ammunition and other short-range, more affordable air defense systems are successfully being used by the Ukrainian Armed Forces for counter-UAS.
 - DOD established the VAMPIRE program for Ukraine that has [created](#) a low-cost air defense interceptor for less-capable threats using a modified rocket called APKWS, of which the DOD has a massive inventory. The DOD [FrankenSAM](#) program achieves the same goal of using existing munitions and radars in a new configuration for air defense.
 - The AIM-9 Sidewinder air-to-air [missile](#), which has a separate production line and a healthy stockpile, is also now part of the Army's integrated and layered air defense program.

SUPPLEMENTAL STRENGTHENS U.S. POSTURE IN INDOPACOM

- **FACT: The supplemental is the most important opportunity Congress has this year to expand U.S. defense production of capabilities to deter China.**
 - The supplemental includes \$16.4 billion in INDOPACOM-relevant munitions, security assistance, and capacity expansion to bolster deterrence against China, including:
 - \$1.9 billion to replenish DOD stockpiles to unlock transfer of weapons to Taiwan which is the quickest way to arm Taiwan for its own self-defense,
 - \$542 million for the INDOPACOM commander's highest priorities,
 - \$3.3 billion for the submarine industrial base,
 - \$133 million for cruise missile motor capacity expansion to enable LRASM/JASSM and Tomahawk higher production, and
 - \$158 million to expand the production of solid rocket motors that are key components of several long-range precision missiles critical to deterring China and create new competition.
- **FACT: The top U.S. military commander in INDOPACOM believes the risk of munitions can be managed but that it would be a strategic victory for President Xi wins if Ukraine loses.**
 - In February, the incoming commander, Admiral Paparo, confirmed in testimony to the Senate Armed Services Committee that DOD could support Ukraine and "not miss a beat" in managing risk in INDOPACOM.

- In March, outgoing commander Admiral Aquilino [testified](#) to the same committee that “a strategic win in Ukraine for Russia is a strategic win for President Xi in China.”
- **FACT: Except for high-end air defense, there is little overlap between the munitions provided to Ukraine and those the INDOPACOM commander has identified as the most important to maintain deterrence or effectively fight the PLA**, such as long-range anti-ship missiles, advanced air-to-air missiles, torpedoes and cruise missiles.

FACT: Our adversaries’ industrial base has its own limitations, and Russia is dependent upon North Korea and Iran. Production statements from RUS/DPRK/Iranian state media should be taken with a grain of salt.

- Russia has had to seek more than a million artillery rounds from North Korea.
- Iran has sold hundreds of short-range ballistic missiles and thousands of Shahed drones to Russia.
- The Russian industrial base is struggling to produce its own precision-guided munitions and faces enduring challenges to significant increased production rates of key equipment.
- Nearly half of Iranian ballistic missiles [failed](#) on the ground or in flight in Tehran’s attack last week.

FACT: Any analysis of replenishment value must also consider that the U.S. is transferring older equipment and replacing it with more capable equipment, such as replacing towed M777 artillery cannons with the more mobile HIMARS launcher for longer range rocket artillery capability; old M113 troop carriers with next generation Armored Multi-Purpose Vehicles (AMPVs) for improved survivability, mobility, and networkability; and legacy Avenger short range air defense systems on HMMWVs with Maneuver Short Range Air Defense Systems (M-SHORAD) on a Stryker double V-hull combat vehicle for greater survivability, mobility and lethality, including a 30mm cannon firing air burst ammunition.

Further Information Available In a SCIF

For a complete picture, the classified information below can be found for review in two identical TS/SCI binders for members/staff in SVC-217. Please contact the Office of Senate Security to do so.

- U.S. Army/EUCOM answer on Ukrainian expenditure rates for PAC-3 and 155mm
- The number of significant capabilities donated by allies and partners, including examples of significant non-public donations and accurate comparisons of EU/RUS 155mm production.
- Complete list of DOD current munitions requirements and deliveries to Ukraine and Israel, including PAC-3, 155mm, and more.
- Assessment by intelligence community of Russian production shortfalls and assessments of Russian military reconstitution and strengths/weaknesses in different areas.