

The Russian Defense Industry: Problems and Prospects

Lt Col John Szczepanski¹

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¹ *Opinions, conclusions, and recommendations expressed or implied within are solely those of the author and do not necessarily represent the views of the Air University, the United States Air Force, the Department of Defense, or any other US government agency.*

The Russian Federation traditionally maintained a sizeable defense industry, both for domestic supply and foreign sales. Some arms-exporting relationships date from the Soviet era. The effect of sanctions, materiel losses in Ukraine, and the performance of some Russian weapons systems will constrain the ability of the Russian arms industry to both produce and to export arms.

Russia has ranked in the top five among global arms exporters, just behind the U.S.² Russia's share of the global market has been decreasing. Between 2012-2016 and 2017-2021 its exports decreased by 26 percent due to decreases in exports to India and Vietnam.³ Russia's exports are highly concentrated, with 73 percent of its total exports going to India, China, Egypt, and Algeria.⁴ (SIPRI 4) In 2021, prior to the full-scale invasion of Ukraine, the Congressional Research Service noted that "sectors of Russia's defense industry struggle with slow production, limited production capacity, and quality control issues."⁵

The Russian arms industry is subject to a series of sanctions from the U.S. and the European Union. These include sanctions directly on Russian companies that were put in place following the 2014 invasion of Ukraine. These sanctions were directly on Russian arms

² "SIPRI Fact Sheet March 2022: Trends in International Arms Transfers, 2021" SIPRI, Stockholm: March, 2022 <https://doi.org/10.55163/CBZJ9986>, 1

³ "SIPRI Fact Sheet March 2022: Trends in International Arms Transfers, 2021" SIPRI, Stockholm: March, 2022 <https://doi.org/10.55163/CBZJ9986>, 4

⁴ "SIPRI Fact Sheet March 2022: Trends in International Arms Transfers, 2021" SIPRI, Stockholm: March, 2022 <https://doi.org/10.55163/CBZJ9986>, 4

⁵ "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937,2>

producers such as JSC Almaz-Antey, Kalashnikov, and United Shipbuilding Corporation.⁶ The Combating America's Adversaries Through Sanctions Act (CAATSA) put further pressure on Russian industry by sanctioning those countries who do business with the Russian defense sector which has resulted in sanctions against China and Turkey.⁷

Even before the 2022 escalation in Ukraine, Russian industry was impacted by supply chains from Ukrainian industry. Among the products imported from Ukraine were aviation engines, transport aircraft, and rockets/missiles.⁸ The Russian aviation industry imported engines from the Ukrainian company Motor Sich until Ukraine banned military and dual-use exports to Russia in August 2014.⁹ Russia's Klimov plant struggled to replace the engines that had been previously produced in Ukraine.¹⁰ In May 2022 U.S. Secretary of Commerce Gina Raimondo testified that repurposed semi-conductors from consumer appliances such as refrigerators and dishwashers were being used in Russian military equipment manufacture due to sanctions.¹¹

Russia's defense industry will likely face difficult prospects, as it will be challenged by sanctions, supply chain availability, and reputation to produce for Russia's needs as well as exports. Arms deals will likely be less profitable and undergirded by political deals or creative financing. Examples include the aborted 2017 barter deal with Indonesia that would have seen

⁶ "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937>, 22

⁷ "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937>, 23

⁸ "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937>, 7

⁹ "We send dozens. Everything goes: Did Motor Sich supply engines for Russian military helicopters during a full-scale war? Here's what's known," Forbes (Ukraine), 24 Oct 2022, <https://forbes.ua/ru/company/motor-sich-pid-chas-garyachoi-viyni-postachala-dviguni-dlya-rosiyskikh-viyskovikh-gvintokriliv-yak-tse-mozhlivo-24102022-9249>

¹⁰ "We send dozens. Everything goes: Did Motor Sich supply engines for Russian military helicopters during a full-scale war? Here's what's known," Forbes (Ukraine), 24 Oct 2022, <https://forbes.ua/ru/company/motor-sich-pid-chas-garyachoi-viyni-postachala-dviguni-dlya-rosiyskikh-viyskovikh-gvintokriliv-yak-tse-mozhlivo-24102022-9249>

¹¹ Jennifer Kavanaugh and Frederic Wehrey, "Russia Can't Fight a War and Still Arm the World," Foreign Affairs, August 12, 2022

Indonesia exchange commodities such as coffee and palm oil for Russian SU-35 aircraft.¹² The deal was eventually cancelled after the U.S. government threatened Indonesia with sanctions.¹³ (CRS 9) The recently reported exchanges of fighter aircraft to Iran in exchange for suicide drones to be used in Ukraine are another example. Russia's dependence on high-end exports instead of low-end military technology, S-400 missile systems versus Kalashnikov weapons, will make it difficult for Russia to produce at quantity for both domestic and export markets. Finally, for those buyers who have choices over arms suppliers, the images of destroyed Russian equipment in Ukraine will likely negatively impact the attractiveness of Russian kit.

¹² "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937,9>

¹³ "Russian Arms Sales and Defense Industry," Congressional Research Service, 14 Oct 2021, <https://crsreports.congress.gov/product/pdf/R/R46937,9>