



Is Iran Contributing to Russian Drone Manufacturing in Yelabuga?

Russian drone manufacturer, established in same city as visited by Iranian drone delegation, also advertises Western drone components

By David Albright, Sarah Burkhard, and Spencer Faragasso

February 23, 2023, updated February 24, 2023, to include that a company located at Alabuga SEZ was sanctioned by the U.S. Department of Treasury for being part of the military-industry

Background

- *The Wall Street Journal* reported that on January 5, 2023, an Iranian delegation visited an “empty site” in Yelabuga, Russia, where a drone facility would be constructed.
- Reporting suggests that Iran and Russia intend to produce 6,000 of an advanced type of the Shahed-136 drone at the purported facility in Yelabuga.
- The Institute for Science and International Security assessed the reported information and attempted to identify through open-source research any possible unmanned aerial vehicle (UAV) manufacturing entity/entities or locations where a drone facility could be established in Yelabuga, Russia.
- Since at least late August 2022, Iran has supplied Russia with hundreds of Shahed-131 and Shahed-136 loitering munitions, as well as the more versatile Mohajer-6 drone systems.
- The Shahed drone system is used in swarm attacks that have proven effective at seeking and destroying Ukrainian civilian infrastructure and static targets. The Russian military seeks to capitalize on this advantage and indigenize the production of the Shahed-136 UAV in Russia.
- The Institute has assessed previously that Russian and Iranian drones, including the Shahed-131, Shahed-136, and Mohajer-6, contain Western-origin dual-use components and designs.

Key Findings

- The Institute identified through open-source information that a Russian drone design and manufacturing company, Albatross LLC, has made an agreement with Alabuga SEZ to establish a UAV production plant in Yelabuga, Russia. The agreement was announced on January 23, 2023.

- Albatross LLC and Alabuga SEZ have an agreement to establish a facility to produce up to 1,000 Albatross M5 UAV drones per year by 2037. The Albatross M5 UAV is a surveillance drone, advertised by Albatross LLC for use in agricultural GIS mapping and other functions. However, a Russian news outlet reported that Albatross LLC intends to supply at least 25 percent of its products produced through the agreement with Alabuga SEZ to the military. The specific type of drone is not mentioned.
- In a Russian news outlet, a representative discusses the desire to create a domestic Russian supply chain for the drone manufacturing plant. Currently, 70 percent of the components are claimed to be Russian made and 30 percent are imports.
- Western-origin dual-use goods or designs may continue contributing to Russian drone production. Indications that the drone manufacturer uses Western software and goods are found in information included in job postings and on the company's website.
- On its website, Albatross LLC advertises products made by Japan, the United States, and France as accessories and parts for the drone systems it offers.
- The Institute has not identified any connection between Albatross LLC and any Iranian entity. It remains unclear what entity will be responsible for the production of Shahed UAV drones on Russian soil, or where exactly the production would take place. Albatross LLC or Alabuga SEZ could be involved.
- The Institute will continue to monitor and assess any new developments involving the Iranian drone facility in Russia and on Albatross LLC and welcomes additional information and input.
- Albatross LLC is not sanctioned by the United States or European Union; regardless, Western distributors of components and software indicated as being used by Albatross LLC should apply additional due diligence, as they may end up in drones used in Ukraine.

Introduction

The Wall Street Journal (WSJ) reported that Iran and Russia signed an agreement to establish a drone manufacturing facility in the city of Yelabuga, Republic of Tatarstan, Russia, to produce 6,000 of an advanced type of the Shahed-136 drone.¹ The Iranian delegation reportedly visited the city on January 5, 2023, and viewed an “empty site” where a drone production facility would be built.

Following this, the Institute sought to identify the entity or several entities that may be responsible for the production of Shahed drones in Russia, or involved in establishing the facility and recruiting needed personnel, as well as the location of the planned production facility. While no direct connection to Iran could be established, the Institute identified a Russian drone manufacturer of interest, with connections to the Russian government and stated intention to supply the military, newly operating in the city of Yelabuga, currently building a new, large drone production facility and recruiting personnel.

¹ Dion Nissenbaum and Warren P. Strobel, “Moscow, Tehran Advance Plans for Iranian-Designed Drone Facility in Russia,” *The Wall Street Journal*, February 5, 2023, <https://www.wsj.com/articles/moscow-tehran-advance-plans-for-iranian-designed-drone-facility-in-russia-11675609087>.

Findings on Russian Drone Manufacturer

Albatross LLC announced plans on January 23, 2023, to establish a drone production facility at the Alabuga Special Economic Zone (SEZ), in Yelabuga, Russia.^{2,3} Headquartered in the Moscow region, Albatross LLC is a Russian designer and manufacturer of UAV drones used to “provide aerial photography and video surveillance services” for a variety of industries, such as agriculture.^{4,5} The company was founded in 2017 and is a subsidiary of GEOMIR, a Russian company specializing in “automated control and management systems” as well as analytical systems based on GIS technologies used in spaceflight, construction, and a focus on precision agriculture, amongst other industries.^{6,7}

Albatross LLC and Alabuga SEZ signed an agreement reportedly worth 1 billion rubles to establish a UAV production facility with a planned output of 1,000 Albatross M5 UAVs per year by 2037.^{8,9} Figures 1 and 2 provide a picture and schematic of the Albatross M5. The Albatross M5 UAV is a surveillance drone, advertised by Albatross LLC for use in agricultural GIS mapping and other photographic functions. The UAV can utilize a number of different types of cameras and instruments, and has a range of over 300 km, propelled by an electric motor.

A company representative quoted in a Russian news outlet claims that “As for sales markets...75% of orders will fall on photo and video filming of linear objects, and only 25% - on military-industrial needs.”¹⁰ Albatross LLC reportedly expects 70 percent of the components to be Russian-made, and the rest to be imported, with the motors, servos and cameras supplied by Chinese companies. Albatross LLC claims it can supply a range of parts and accessories produced by Western companies for its UAV drone systems, including Sony brand cameras and Nvidia components, companies based in Japan and the United States, respectively.¹¹ Table 1 lists the identified parts found on its website. Additionally, job postings in Yelabuga for UAV designers, engineers, assemblers, and quality supervisors listed by Albatross LLC and Alabuga SEZ include requests for experience using Western design software (see Table 2).

² “Organization OOO ‘ALBATROS’,” List-org.com, February 2023, <https://www.list-org.com/company/9767268>. [Google translation.]

³ “The Albatross company has opened the production of unmanned aerial vehicles in the Alabuga SEZ,” Albatross LLC, January 23, 2023, <https://alb.aero/about/news/kompaniya-albatros-otkryla-proizvodstvo-bespilotnykh-vozdushnykh-sudov-v-oez-alabuga/>. [Google translation.]

⁴ “Contact,” Albatross LLC, February 2023, <https://alb.aero/contacts/>. [Google translation.]

⁵ “About,” Albatross LLC, February 2023, <https://alb.aero/about/>. [Google translation.]

⁶ “Home,” JSC GEOMIR, February 2023, <https://www.geomir.ru/>. [Google translation.]

⁷ “Company,” JSC GEOMIR, February 2023, <https://www.geomir.ru/about/>. [Google translation.]

⁸ “Albatross M5,” Albatross LLC, February 2023, <https://alb.aero/catalog/bpla-samoletnogo-tipa/albatros-m5/>. [Google translation.]

⁹ Tatyana Renkova, “Alabuga will produce drones and motor boats from composites,” JSC ROSBUSINESSCONSULTING, January 12, 2023, <https://rt.rbc.ru/tatarstan/12/01/2023/63c00cfc9a79470c05660cf4>. [Google translation.]

¹⁰ Diana Avakyan, “The boom of drones and boats made of composites: who will bring “Alabuga” 81 billion,” Business Online, January 13, 2023, <https://www.business-gazeta.ru/article/579624>. [Google translation.]

¹¹ “Payload,” Albatross LLC, February 2023, <https://alb.aero/catalog/poleznye-nagruzki/>. [Google translation.]

Western Products Albatross LLC Claims it Can Supply

Producer	Product	Country of Origin
Sony	Sony A6000 Camera	Japan
Sony	Sony RX1R2 Camera	Japan
Sony	Sony Gyro-Stabilized A5100 Camera	Japan
Sony	Sony FCB-EH6500 Full HD video camera	Japan
Sony	Sony Gyro-Stabilized FCB-EV7500 block camera	Japan
Tamron	Tamron MP1010M-VC Full HD video camera	Japan
Parrot	Parrot SEQUOIA+	France
Parrot	Parrot Gyro-Stabilized SEQUOIA+	France
FLIR	FLIR Vue Pro PAL thermal imager	United States
Nvidia	Nvidia Jetson Analytical Module	United States

Table 1. A list of Western parts found advertised on the website of Albatross LLC.¹²

Software Experience Requested by Alabuga in Job Postings in Yelabuga, Russia

Producer	Software	Country of Origin
Siemens	Siemens NX	Germany
Compass Software	Compass	United States
Autodesk Inc.	AutoCAD	United States

Table 2. A list of the Western software experience requested in job postings by Alabuga SEZ related to drones and UAV design and manufacturing.

Ultimately, Albatross LLC has stated its intention to completely “replace all these imports on the territory of Alabuga.”¹³ Whether it can do so in the short term is doubtful.

¹² “Payload.”

¹³ “The boom of drones and boats made of composites: who will bring "Alabuga" 81 billion.”

The listing of goods, as well as statements on Chinese supplies and attempted indigenization of the supply chain, indicate that Western goods and designs are at risk of being illicitly procured or copied for the increased drone production effort. The Institute previously assessed that key Russian and Iranian drones contain many Western components, with the Iranian Shahed-131, Shahed-136, and Mohajer-6 in particular including designs of critical components made by Western companies that have been indigenized and adopted by Chinese and Iranian companies.^{14,15}

Albatross LLC claims in its post on January 23, 2023, that a portion of drone production had already commenced at an unnamed location at the Alabuga SEZ; this can be seen in a video posted to the company's page on a Russian social media platform on January 16, 2023.¹⁶ The final production space for the UAV drone systems is reportedly 2,200 square meters, which can be easily accommodated by the Alabuga SEZ, an industrial complex hosting multiple large industrial companies. Alabuga SEZ advertises rental facilities with infrastructure (water, HVAC, power, etc.) that can accommodate a 2,200 square meter production space.¹⁷ Figure 3 provides an overview image from Google Earth of the Alabuga SEZ, dated April 2022, and Figure 4 shows it situated north of the city of Yelabuga.

Besides the coinciding visit of the Iranian delegation to Yelabuga, at present, the Institute has found no discernable connection between Albatross LLC or Alabuga SEZ and any Iranian entity in open-source materials. GEOMIR, the parent company of Albatross LLC appears to have connections with the Russian government and military. In one instance in 2016, a tender was fulfilled by the founder of GEOMIR and Albatross LLC, Frolov Alexey Vadimovich, for a Russian military entity for the "development and implementation of an automatic landing system for a small class aircraft-type UAV on a ship using an intelligent vision system."^{18,19} Although Albatross has connections to the Russian military and has pledged to produce military drones, none of the listed companies at Alabuga SEZ appear to have a primary military purpose or significant visible security as far as can be seen in available Google Earth satellite imagery. However, a carbon fiber manufacturing company located in the Alabuga SEZ was sanctioned by the U.S. Department of Treasury on February 24, 2023, for being part of the Russian military-

¹⁴ Spencer Faragasso, "Russian Military UAV Used in Ukraine Depends on Foreign Parts," *Institute for Science and International Security*, May 11, 2022, <https://isis-online.org/isis-reports/detail/russian-military-uav-used-in-ukraine-depends-on-foreign-parts/>.

¹⁵ David Albright, Sarah Burkhard, and Spencer Faragasso, "Iranian Drones in Ukraine Contain Western Brand Components," *Institute for Science and International Security*, October 31, 2022, <https://isis-online.org/isis-reports/detail/iranian-drones-in-ukraine-contain-western-brand-components/>.

¹⁶ "Video by Albatros LLC," VK.com Social Media Page for LLC 'Albatross', January 16, 2023, https://vk.com/club155214319?z=video-155214319_456239031%2Ff9ac6f53f6e0beb57c%2Fpl_wall_-155214319. [Google translation.]

¹⁷ "To Rent: Industrial Park Synergy 2," Alabuga SEZ, February 2023, <https://alabuga.ru/>. [Google translation.]

¹⁸ "Contract No. 1920100320916000072: Albatross LLC", <https://zakupki.gov.ru/>, October 10, 2016, <https://zakupki.gov.ru/epz/contract/contractCard/common-info.html?reestrNumber=1920100320916000072>. [Google translation.]

¹⁹ "Florov Alexey Vadimovich," List-org.com, February 2023, <https://www.list-org.com/man/3637201>. [Google translation.]

industrial complex and producing “various types of carbon fibers used in aerospace and aircraft engineering.”²⁰ The Institute will continue to monitor Albatross LLC and the Alabuga SEZ for any new developments or possible connections to Iran and welcomes additional information and insights.



Figure 1. The Albatross M5 UAV that Albatross LLC plans to produce at the Alabuga SEZ.

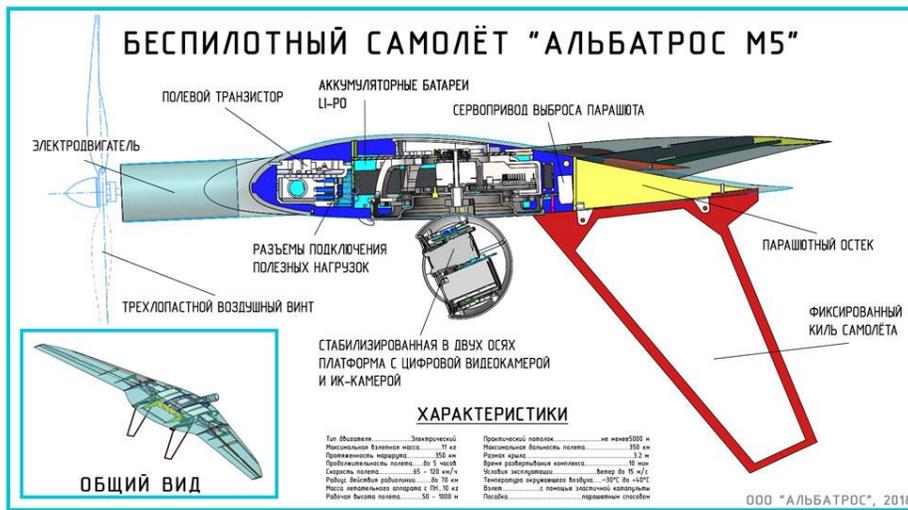


Figure 2. Schematic of Albatross M5 found on the Albatross LLC website.

²⁰ U.S. Department of Treasury, “Targeting Key Sectors, Evasion Efforts, and Military Supplies, Treasury Expands and Intensifies Sanctions Against Russia,” February 24, 2023, <https://home.treasury.gov/news/press-releases/jy1296>.



Figure 3. Alabuga Special Economic Zone, Yelabuga, Republic of Tatarstan, Russia, April 21, 2022. (55°50'2.40"N,52° 3'57.28"E)



Figure 4. Alabuga SEZ is north of the city of Yelabuga.