# HARPIA PUBLISHING BULLETINS

Russia's Military Aviation Industry | Status Winter 2024-25

Piotr Butowski





### Russia's Military Aviation Industry

#### The current status of Russia's military aviation industry

#### Piotr Butowski

#### **Executive summary**

This publication details the production of aircraft, helicopters and air weapons in the Russian Federation for its war needs. In 2024, the Russian Ministry of Defence received about 2.5 times more tactical combat aircraft than in 2021. The pace of production of combat helicopters has similarly increased.

Air weapons and UAVs have become ever more important, with the priority given to low-cost systems. New products were developed specifically for the needs of the war with Ukraine, including UMPK wing kits for general-purpose bombs, which are now in production at a rate of 3,500 per month. An unusual situation saw the purchase of Shahed one-way attack UAVs from Iran. Production of these was then launched in Russia (as the Geran) as a low-cost alternative to strategic cruise missiles.

A strategic issue for Russia's aviation industry is the progressive loss of competence, which began long before the war. It is increasingly doubtful that Russia will be able to create next-generation products and the United Aircraft Corporation's spending on R&D declined in 2024, indicating a reduction in new projects. New problems have arisen during the war, with Western embargoes on supplies to the Russian arms industry, leading the nation to launch 'import substitution' programmes, as well as 'parallel imports' (a euphemistic term for smuggling foreign-made components). A further issue is the lack of support for production tooling, which is almost all foreign, and the sudden increase in production has also caused personnel shortages.

#### **Contents**

- · The Russian aviation industry directory
- Military aircraft production before the war
- The Russian economy enters the war track
- Military aircraft production during the war
- Long-term and emerging problems of the Russian aviation industry
- Summary and a look into the future [Conclusions]

For further information on this 135-page document, please contact us at bulletins@harpia-publishing.com

## **Contents**

Introduction5
Chapter 1   Russian Federation's Aircraft Industry Directory
Fixed-winged aircraft
PJSC United Aircraft Cooperation
Ural Works of Civil Aviation30
Helicopters31
JSC Russian Helicopters31
Uncrewed air vehicles35
Air-launched weapons39
Aircraft engines44
JSC United Engine Cooperation44
Further engine-producing companies45
Map of Russia47
Chapter 2   Production of Military Aircraft and Helicopters in the Russian Federation before 202249
Chapter 3   The Russian Economy Enters the War Track55
Chapter 4   Military Aircraft and Weapons Production during the War 61
Fixed-wing aircraft61
Deliveries of military aircraft in 2022–202462
Su-57: assessing the production volume66
Su-34: assessing the production volume68
Repairs and spare parts became a priority69
How much do Russian military aircraft and weapons cost?
Helicopters74
Ka-52: assessing the production rate74
Mi-28NM by Rostvertol77

	Uncrewed Aerial Vehicles	78
	Micro FPV drones	78
	Lancet loitering munition: assessing the production volume8	31
	Orlan mini UAV: assessing the production volume	31
	Forpost	33
	Shahed/Geran OWA UAV: assessing the production volume	34
	S-70 Okhotnik heavy UCAV	35
	Air-launched weapons	37
	The renaissance of general-purpose bombs thanks to wing kits 8	37
	Relaxation of formal requirements	)1
	Raduga Kh-101 strategic cruise missile	)2
	Selected other weapons	)5
	Two interesting documents	)7
	Exports	)()
Chapter 5 of the Rus	Long-term and Emerging Problems sian Aviation Industry10	)4
	Loss of competence	)4
	How the Russian aerospace industry lost India and China	)8
	Civil aircraft production forecasts: first inflated, now slashed11	l1
	Import substitution and parallel import11	l5
	Substituting imports from Ukraine11	l6
	Parallel import11	۱7
	Maintaining the foreign production equipment11	18
	Staff shortage	ا9
	Investments into production facilities	20
Summary a	and a look into the future [Conclusions]12	3
Abbreviati	ions12	8
About the	author12	9
Endnotes	13	0