

MS-21 - digest for April-2022

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Frame from the reportage of the TV channel "Russia 1"

Prior to the start of the SVO in Ukraine and the cessation of deliveries of foreign aviation equipment to Russia, the UAC planned to transfer within several years to airlines from 80 to 100 domestic aircraft per year, and as stated in early April in an interview with the Russia-24 TV channel, the head of the corporation Yuri Slyusar, these plans have not changed, and the MS-21 will have 72 aircraft.

This year, two MS-21 aircraft with PW1400G engines and a wing made of Russian PKM are to be transferred to Rossiya Airlines. However, according to Slyusar, "this does not make much economic sense, insofar as it will not be very cost-effective to maintain the airworthiness of two aircraft in this" person "". Aircraft in this configuration will be transferred to controlled operation, but not for commercial transportation of passengers, but for training and education of crews, obtaining data and identifying "childhood diseases".

"We will also carry out transportation, because at the present time every aircraft counts, and including these two aircraft, I am sure, they will find their place in the air transportation market," Yuri Slyusar added. He explained that the share of domestic components in MS-21 is approximately 50%. The task of the UAC in the MS-21 import substitution program is to completely fly off in experimental [controlled] operation in the 23rd year and from the 24th year to begin the supply of the MS-21 completely with Russian components.

Prior to the rupture by the European Union and the United States of all contractual obligations for the supply of engines and components for the MS-21, the UAC plans to transfer six aircraft to Rossiya and Red Wings airlines in 2022, then this figure dropped to four. In April, in an interview, Rostec CEO Sergey Chemezov said that the first six production MS-21s with domestic PD-14 engines would be delivered to customers in 2024. Considering that the agreement between Irkut and the Ministry of Industry and Trade under the import substitution program ends on December 31, 2023, these six aircraft will be 100% Russian.

On April 22, it became known about the preparation by the Ministry of Industry and Trade of a draft decree of the government of the Russian Federation, which proposes to extend the rules for subsidizing lease payments for SSJ100 aircraft and for MS-21. Now the state allocates 37.5 thousand rubles to airlines from the budget. per one flight hour of the Superjet. It is planned to allocate the same amount to compensate for the costs of leasing and servicing MS-21. "The result of the subsidy is to provide at least 60 hours of average monthly flight time for one aircraft in the reporting period," the explanatory note to the draft resolution says.

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In Rybinsk, UEC-Saturn mastered technologies for manufacturing aircraft engine blades by high-precision spinning of titanium blanks on special equipment, as well as hybrid forging of blades from a two-phase titanium alloy. These technologies are and will be used in the production of the PD-8, PD-14 and PD-35 civil aircraft engines.

The Poljot enterprise of the Ruselectronics holding has created a short-range and long-range communication system for domestic aircraft. Similar foreign equipment is already changing from MS-21 to domestic. By the end of the year, Irkut will receive 20 radio stations. In addition, intercom equipment has been developed for the MS-21, the certification of which will be completed in September this year, as well as software for data transmission in civil aviation networks.

On April 27, an experimental aircraft MS-21, number 73053, performed a flight in which the operation of new radio equipment and, in particular, new software and mathematical software was evaluated. This was told to our site by a test pilot of the OKB im. Yakovlev, Hero of Russia Oleg Mutovin, who was in the crew on this flight.

In total, aircraft 73053 and 73055 carried out 14 flights in April with a total duration of 49 hours and 48 minutes.

“Aircraft 055 continues to fly to assess the possibility of launching PD-14 engines in flight over the entire range of aircraft speeds, at various altitudes and by various methods: from the APU, from a running engine and from autorotation,” explained Oleg Mutovin. He added that during the tests, hot and cold, after prolonged cooling, engine starts are performed.

“The work of ACS and SARD is also evaluated while ensuring comfort (pressure drop, temperature) in the cabin when air is taken from one running engine,” said Oleg Mutovin.

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Lead flight test engineer Pavel Sokut told Rossiya 1 correspondent Dmitry Petrov in a report from Zhukovsky about the test flight program: "We consistently performed a series of different launches of both the left and right engines, in various ways. The mode program implies engine cooling before a normal shutdown, then cooling before starting. Everything went well, no comments."

As previously reported, the remotorization of the first prototype MS-21 (73051) aircraft for PD-14 engines is underway in Irkutsk. According to Yuri Slyusar, said in an interview with the Rossiya-24 TV channel, the UAC now has two aircraft with Russian engines, which may mean that the work on remotorization at IAZ is coming to its logical conclusion, and soon the aircraft will be connected to test flights.