

L-76MD 90A: NEW STEP IN VKS TRANSPORT AVIATION

Within 2020 the Russian defense industries fast-tracked delivery of transport aircraft for the Russian Aerospace Forces (VKS —Vozdushno-kosmicheskie sily). Reportedly, on December 6, 2020, the Il-76MD-90A military transport aircraft built at the Ulyanovsk Aviastar-SP JSC (part of the United Aircraft Corporation JSC) completed a maiden flight. This is the third Il-76MD-90A aircraft of the new construction, taken into the air in 2020. The contract between UAC and VKS includes 39 Il-76 military transport aircraft—a robust work horse since the Soviet time being nicked as «Candid» by NATO. The new version got «Il-76MD 90A» designation to place questions what is really new with this machine?

The Russian experts claim that 90A is a «completely new aircraft» with key features as the PS-90A engines and a modern flight and navigation system. During the Soviet times, Ilyushin aircraft had been produced at the plant in Tashkent, now independent Uzbekistan. So, Russia shifted production line to Ulyanosk on the banks of the Volga river where the machine drawings were digitized. This allowed to improve production line dramatically and speed the process of its modernization.

The new Candid received an improved wing design with 4 Perm-made PS90A-76 engines with a thrust of 14.5t each, a reinforced landing gear to allow use of all types of airfield, upgraded electronic and navigation system, an airborne defense complex against anti-aircraft missiles providing jamming in infrared, ultraviolet and laser ranges as well as radar jamming. The plane received a «glass cockpit» with 6 LCD screens. The new emergency evacuation system was also implemented.

The width and height of the cargo cabin are 3.45 and 3.4 meters respectively to transport various equipment including tanks and missile launchers.



The Il-76MD-90A can carry 126 paratroopers with full equipment, or 145 soldiers in a single-deck version and 225 in a double-deck version. The service life of the Il-76MD-90A is 30 years and can be extended.

The aircraft is capable to bring 60 t of cargo on a distance of 4000 km, while 40t up to 6500km which is equal to a distance from Murmansk to New York or from Komsomolsk to Seattle. Being based in Irkutsk, the vehicle is capable to reach any port in China, India and Middle East. The new engines have a drastically lower noise level and a fuel consumption ratio as 187 gram/t/km to allow commercial operations as well.

The Il-76 has been produced in almost 900 copies being exported to over 30 countries while in service in military and commercial operation, including fire-fighting.

The Il-76MD 90A is able to open a new page in the Candid history. This autumn Russia demonstrated to the Indian Air Force delegation how to use the Il-76 for the so-called carpet bombing. The MoD released a video with practical bombing and firing of aircraft cannons at ground targets, carried out by the VKS regular crews in the Tver region of Russia as part of a control check. The flight altitude varied from 300 to 1000 meters, and the speed exceeded 500 km / h.

According to the source, the flights were attended by the crews of the Tver, Pskov and Ivanovo air regiments, including young pilots. Each of the crew members flew at least three sorties. Keep in mind that India also has a fleet of 17 Il-76 transport aircraft, as well as seven Il-78 air tankers to allow the IAF to carry out similar missions.

According to experts' estimations, in the foreseeable future the world's major operators of military transport aircraft are going to gradually renew their existing fleet, and Russian manufacturers are for a strong share in this segment. In particular, the newest Russian military transport and special aircraft of the Ilyushin family have excellent export prospects due to aerodynamic perfection, reliability and cost-efficiency.

The new plane export version designated as Il-76MD 90A (E) has been marketed by Rosoboronexport and is to be shown as a part of the national exposition at Aeroindia -2021. The State arms dealer will definitely use platforms of the upcoming events such as MAKS and Army for the aircraft live demonstration for potential customers from the CIS countries, Asia, Africa and Latin America.