

13-Jan-17 – Russia Is Changing Tactics In Syria

Description

By Valentin Vasilescu

Translated by Alice Decker

Originally posted at Algora Blog.

Image not found or type unknown



By January 10, 2017, Russia had deployed more Su-25 SM3 fighter bombers in Syria and withdrawn four Su-24 Ms. This is a signal that Russia is changing tactics in combating Islamist terrorism. The Su-25 has been modernized in multiple stages, resulting in the models Su-25 SM/SM2/SM3, with the latest modernization taking place beginning in 2013. The Russian Air Force has about 150 of the upgraded Su-25 aircraft (SM3/UBM2), along with another 120 non-upgraded Su-25s. The aircraft is powered by two RD-195 engines, with a thrust of 4,500 kgf, and has a maximum speed of 975 km/h.



Interestingly, at the time they attempted to impose a ceasefire in Syria, on February 27, 2016, Russia withdrew from Syria almost all the fifteen Su-25SM3s. As the fighter jets were over 20 years old and had each had over 200 flying hours in Syria, they were sent to Russian aviation repair shops for inspection. This is a part of testing military equipment and train the Russian military under field conditions, with a view to defending against a NATO invasion of Russia [1].

What is the nature of Russia's change in tactics in fighting Islamist terrorists in Syria? Until now, Russia has attacked targets in Syria using cruise missiles launched from submarines, surface warships and long-range bombers. On the other hand, the Russian tactical bombers that operated from the Hmeymim base in Syria executed missions that were planned in advance, after unmanned reconnaissance located targets hours or days earlier. As a rule, these targets were not very mobile and were at a safe distance from civilians and the Syrian army troops. The Russian aircraft were armed with just two bombs or air-to-ground rockets, laser-beam guided by GPS and TV/IR, with the bombings executed from altitudes of 8,000–10,000m.

Russia's change of tactics in Syria means that Russian aircraft will be tasked almost exclusively with close support missions (CAS — close air support) in order to create breaches in the Islamist rebels' defense that will permit the swift advance of Syrian troops. Now, the Su-25 SM3 is the best suited aircraft for such missions. Most close support missions will be carried out at night, without timely, detailed information from unmanned reconnaissance drones, and will consist of lengthy patrols at high

altitudes in areas located over territory held by Islamists rebels, using the “target hunting” approach. Once a target is identified, the pilot initiates the procedure for attacking it.



However, close support missions require perfect coordination in time and space with the military on the ground, which entails the use of Russian officers specializing in routing Su-25 MTS aircraft and firsthand target identification from the ground up. First, they identify the position of the pilots carrying out close support, by radio and, what is obligatory at night, by an invisible laser beam device that is detected by optical sensors onboard the Russian aircraft. Then the flight controller/targeting officer [NATO: Forward Air Controller; US: Joint Terminal Attack Controller (JTAC)] uses the same instrument to mark with a laser beam the target that is to be hit. This provides the maximum accuracy in hitting moving targets like Toyota trucks armed with machine guns or sniper teams and rebel support bases located in the lower floors of buildings.



The electro-optical SOLT-25 system (with laser, TV and IR sensors) mounted in the nose supports the FLIR [forward-looking infrared] and the GLONASS navigation systems, for seeking and identifying targets from high altitudes for night strikes. For attacking targets, the Su-25 SM3 has the PrNK-25SM Bars navigation/attack suite for central fire control, using the SOLT-25 electro-optical system and a rangefinder with a laser marking instrument to direct precision weaponry. In the process of “target hunting,” guided bombs or small arms are rarely used, with unguided rockets and onboard cannon most often preferred. The SM3 Su-25 has a double-barreled GSh-30-2 type rotary cannon, 30 mm caliber firing at a rate of 2000 rounds/minute, using incendiary/armor piercing projectiles, incendiary/explosives and AP-T projectiles (Armour-Piercing Tracers) with a tungsten core.



The Su-25 SM3 has ten mounting points in the wings and fuselage which can take extra tanks and guns weighing 4340 kg. When “target hunting,” the Su-25 SM3 is equipped with eight to ten UB-32/57 blocks, each armed with thirty-two S-5M/K reactive projectiles (57mm caliber), or B-8M1, B-13L, PU-O-25 rocket pods, armed with rockets of 80mm, 122mm and 266mm caliber. An attack consists of launching a salvo of cannon projectiles or reactive projectiles at a dive angle of 15–30 degrees, from heights of 1000–3000m. The “target hunting” approach makes it possible to execute several attacks on different targets.



However, while they are much more effective than bombing runs planned in advance, close air support missions are extremely risky, as below the altitude of 5,000m all aircraft are vulnerable to MANPADS, and below 3,000m they are vulnerable to heavy machine guns and to 12.7mm, 14.5mm, 23mm and 30mm caliber cannons, which are in the possession of the Islamist rebels. The Russian Su-25 fighter jet is the equivalent of the American A-10, both having titanium armor weighing in at 500 kg, with a thickness of 15–30mm, which resists 23mm-caliber projectiles and carbon fiber projectiles (which produces fragmentation).

To protect against surface-to-air missiles, the Su-25 SM3 is equipped with the Vitebsk-25 system, similar to the Spectra ESM one seen on the French Rafale fighters. It locks in on the aircraft based on the enemy radar, calculates its azimuth and the type of aircraft, and after that jams the signals on many frequencies, using the L-370-3S integrated system. The Vitebsk-25 also protects the Sukhoi-25 SM3 against IR- and laser-guided missiles, including ground-to-air missiles (MANPADs), using the APP-50 passive jamming subsystem that generates infrared decoy flares.

*

[1]. HOW COULD THE CONFLICT IN SYRIA END IN 2017? (<https://southfront.org/how-could-the-conflict-in-syria-end-in-2017/>).

[2]. Who Forced Russia to Intervene in Syria? (https://www.algora.com/Algora_blog/?p=163).