

Feature

It Happened So Fast!

A Lock On: Modern Air Combat Air to Air Mission

by Cat

Привет, товарищ!

I must be...what is your word, *tovarisch*...melodramatic now, no? I am Sacha Dimitrova Andreevna, but you, my friends, you may call me Sacha. Vasily, my section-mate...wingman, in your tongue? He and I have had many adventures in my country's fight against the Sheik. You have heard of him, no? He is a most evil man. The Sheikh Sheikh Muqtadeh al Sadr ibn Sistani leads the Islamic Liberation Resistance Front. And he has the help of the Turks, who have their eyes on our southern flank. It is Georgia the Turk covets, for it is small. But not helpless!

I have had a small part in our war in the East. You too know the war on terrorism. Here, we have lived with the threat for long and long. It started when our Soviet Union was lost in Afghanistan, and later with the Chechens, where the war goes on still. And now, in Georgia. The wily Turk moves east while our back is turned to Chechnya, and the Americans their allies are busy in the Iraq, and Afghanistan too-they know America and the U.N. would not let them do this.

The world is coming to help us now, but only slowly, for the war is a vast one. We must help ourselves. For now, America sends its E-3 AWACS to be our eyes, and that is enough. Later, we are told a squadron of your F-15 fighters will come, and I am to go to help them in our country! This is so because I am fortunate to have been to your "Red Flag," and have trained with your U.S. Air Force. They too are great warriors. But that is another story for another time. Soon, the Canadians, and the Germans, and other nations will fly here to put a stop to the Sheik's madness. Only together may this war be won.

***"I am fortunate
to have been to your
"Red Flag..."***

For today, the Turk tries to stir up trouble over the Black Sea. He is the Sheik's eyes. His hated F-4 fighters have been regularly violating the airspace of our brotherly Georgian neighbor, who have no air force of their own. Today, however, our 586 Fighter Interceptor Squadron is in-theater. It is a most glorious squadron, and the Turk does not know this. He will learn. We will teach him. In the Great Patriotic War, it was composed of all women! But now, it is... your term is "co-ed?" My wingman, Vasily, is more skilled than I. I blush to be called section leader. But our task is air to air combat in the 586th, and this is my training. Vasily came to us from the ground-attack unit. We are based at the Adler airfield, in the city of Sochi on the Georgian coast. From Sochi base, we can see the beautiful Black Sea, which you will soon come to know, when your countries send you to fight with us soon.

This day we are assigned Ground Alert duty, which means idling at the end of Adler Runway 15 waiting for the action. Early this morning, Vasily and I met with our Commander, who briefed us on the mission. You know what that is. We will wait, and when the American AWACS, code name Overlord, sees the daily insult to our brothers, we will smartly slap the Turkish dog on the nose. I have the choice of loadout for this mission. Vasily and I meet with the Armourer, and I ask for two R-27EA, two R-27RE, two R-27TE, two R-73, and the Sorbtsiya jammer pods. The EA is the only active radar missile that our beloved Su-27P can carry, though a modification to the N-001 radar is posited to allow R-77 carriage. This has not reached the front yet. Be sure that it will, and we will be stronger still when it does. We carry TE and RE to fire in pairs at the proper range. The TE will sneak up on the Turk, while he is trying to evade the semi-active radar missile. His F-4, unlike the despised F-16C the West has given him, has no AMRAAM. We rejoice at this, for it makes our task easier.



We saw the meteo officer later, before the GAZ jeep came to take us to the flight line. He poured glasses of tea, as is his custom, and I munched on cucumber slices as he briefed us.

“Expect clear air turbulence today, Sacha. Winds are unpredictable at all altitudes, but the temperature is expected 20 degrees at sea level. It will be a nice, breezy day for you to enjoy at the end of the runway!” He laughs at his little joke. Vasily pulls a face at that.

“We will roast in those Nomex suits.”

“As for me, I will lose weight!”

“You are thin enough, Sacha.” Vasily shook his head. *“You will blow away as soon as you open your canopy.”*

The GAZ jeep came 'round just then, its horn sounding shrill in the rapidly lightening morning air. The early chill and dampness was beginning to lift, and we clambered in, shoving the flight bags of maps and notes into the back, haphazardly. The enlisted driver sped across the cracking concrete of the old Soviet-era base, past dilapidated hangars and buildings. We are not rich like Western air forces, but we fight well on the cheap. The paint is worn on our birds, but under the skin they are top-notch.

Our colour-scheme is the old Soviet-era three colour air superiority camo, with green radome and trim, and red numbers at the nose and tailfins. My craft is No. 11. I meet Sergeant Kulikov, who is my crew-chief, and we carefully walk around my 11, carefully checking to ensure it is ready. Today, we will be tested. I climb the narrow ladder, and settle into the cockpit.

***"We are not rich
like Western air forces,
but we fight well
on the cheap."***

The Su-27 is a tight fit, even for a woman. It is comfortable for me with a minimum of adjustment, though, and fits like a glove. My head in its white-painted helmet-the only one in our squadron with no decoration, I get much kidding about this-fits into the headrest and my eyes are on perfect level with the head-up display. The tractors have already towed us to the end of the runway, and we are there in the overrun area with cords to the APUs, waiting for the action! Vasily is sleeping, as usual. I am too excited to sleep. Our ground-crew is unconcerned. Our guns are strong, our tanks are fast, and our men...ah, our men, there is no need to speak of them. Isn't that how the old Red Army song goes? I forget. They play cards by the APUs, which are humming to power our jets on the ground. We can start with a moment's warning.

Time drones on, and I lose myself in a paperback. Soon, it is nearing the noon hour and I am about to climb down for a break after nearly four hours of waiting. I bite into a sandwich, and this is my first mistake. My headphones crackle a warning from the tower. The Turks are coming this way! We are ordered to scramble!

At the airfield siren's wail, I pitch my sandwich out and call to the ground-crew to warn them. I see them in my mirrors scurry around as I hand-signal that I am starting my right motor. A whine from Vasily's No. 12 bird next to me as the inertial starters kick in. Kulikov stations himself in front of me and motions me through the start checks. Soon, I am disconnected from ground power and my flight surfaces deflect in their pre-launch stretch-dance; my bird yearns for the sky. The checks are complete and Kulikov snaps a salute, much like crew chiefs in your own air forces. The runway is ours! I firewall the throttles for a showy, afterburner takeoff. We do not usually do this, but today, we will show our brotherly Georgian allies that the Rodina is here to fight for them!



F2  Su-27 Me(Sacha Andreevna) S:179 A:32 G:1.0 C:43°26'57"N 39°58'07"E 01/12:00:11 R1.00



Two, Wheels Up

F2  Su-27 Me(Pilot1) S:517 A:57 G:1.5 C:43°26'38"N 39°57'06"E 01/12:00:26 R1.00



My 11 rockets off the first third of the runway in a steep climb. I stabilize, and button up my oxygen mask. Selecting DVB long-range combat mode, I briefly initialize the N-001 radar to boot up the American Link-16 device, and my aircraft's computer synchronizes with Overlord's datalink. Even the wonderful F-15C does not have such equipment as this! I call the Americans to tell them we are responding, but they already know this. It is time to get down to business, as you Westerners say.

"Overlord, 711, bogey dope."

The Americans have two enemy aircraft inbound, south of us and closing fast at medium altitude, distance approximately 90 kilometers distant. As I chat with the AWACS controller, my SPO-15 "Beryozha" radar-detector shows a return, an airborne radar ahead, above, and just to my left. I adjust my multifunction display until I see the inverted triangles that represent the enemy. We are nose cold and I have a plan.





"712, pince right."

"Two, copy." Vasily is confident. Good. On the AWACS link I see him swing out right, setting up a funnel for the enemy flight, which is still oblivious to our presence.



My SPO-15 is beeping with their radar sweep. Soon, the two-man fighters will see us. They have operators in the back seat for their radar sets. I check the APP-50 dispenser, and see I have 32 combined chaff-flare cartridges available.



The SPO-15 beeps, and then emits a steady tone. The Phantoms have locked onto me!



I have seconds before a Sparrow-M will be launched. I cut in Music to gain time, and in DVB mode, I see two ranked contacts coming into focus. My DVB HUD is oriented in the same "god's eye" mode that you Westerners are used to in your APG-63, 68, 70, or 73 radar units.



I designate the lower one, which is closest to me, and fire an R-27TE...

...then pull a hard, 9-g turn left, punching APP-50 cartridges.



The shrill beeping from the SPO-15 is punctuated by a warning from Vasily, *"One, missile launch, twelve o'clock!"*

Immediately, I roll out and put the incoming Sparrow on my beam. We are far enough away that I remain in DVB, with a lock on the element lead. I see the AIM-7's smoke trail, but the radar lock has been broken; the missile streaks by, behind me, impotent.

"Missile away."

Vasily is not about to let me be the only one to gain a kill this day. He has fired at the remaining F-4, an R-27ER. As I correct and roll back in, Vasily curses, for the Turk has broken the lock.

"One, shooter." I am calling for the next shot, but Vasily has already let fly with another R-27RE.



"Roger. Missile away."

He is concentrating on the second F-4 as I reset into BVB-Vertical Scan mode, and mash the button. The system pops into Autotrack mode, and the arrow at the bottom left of my BVB-ATK display is pointed hard across the HUD, telling me that the element lead is beaming me to break the radar lock. The arrow at the bottom left of my DVB-ATK display is pointed hard across the HUD, telling me that the element lead is beaming me to break the radar lock.

In my excitement, I have relied on my radar too much! This would lead to my fast death were my opponent a NATO or American flier. Thankfully, this Turk is too stupid to exploit my error. He and his wingman cross my path, in an effort to evade Vasily's missile. I will make them dance for their pains.

"Fox two, long."

I release my last R-27TE. I am less than six kilometers away and this is no-escape range. The Turk never sees what hit him.



His smoking wreck blazes a trail from left to right across my canopy, and now his wingman is exposed. I will get this shot; Vasily has missed again and I have the honor. He will hear about this at table tonight!



The Turk's wingman desperately jockeys for position, pulling a hard afterburner turn to get a Sparrow lock on me.



He will fail, though, for I have the angle on him and an R-27RE ready to fly.



"Fox one, long."

I release and follow it with a second. I have him, now.

He cannot escape, though he frantically attempts to evade.

The first missile detonates and the Phantom bursts into flame followed by a perfect hit from its twin as the canopy flies off for an attempted ejection.





Flashing past the black, oily trail I look up to see if the crew escaped from the fireball and see parachutes. Vasily has seen them as well, and calls for an FSB coast-patrol unit to pick them up for interrogation. We will learn much from these rogue airmen.

As fast as our fight began, it was over. I call the Americans.

"Overlord, 711, picture."

"711, picture clean."



We've done it! Vasily tucks into his accustomed spot on my wing as I punch in the nav-return mode for a direct flight return to Sochi-Adler.





The landing is bumpy from the turbulence, as predicted by the met officer, but my Pos HUD pops up at the outer marker just as programmed, and I pop my drogues to show off as I touch down. It is a showy landing; I must point far to the left of the runway and crab as I approach, then snap into position for the landing. It is most tricky, but pretty to see. You would call it a "photo op," no?





And now, perhaps the Turk will be more careful of Georgian airspace. We will see in the future. This war has only just begun.

If you enjoyed this and would like to see more of Sacha and her friends, tell us about it on the Forums [here](#).

Test System Specs

- AMD Athlon Thunderbird XP 2200+ processor overclocked to XP2500
- Asus A7N8X mainboard with onboard Aureal AC97 sound
- 512 MB 133MHz DDR SDRAM
- Creative 12x CD-ROM
- Maxtor 40GB main drive
- Windows XP
- Thrustmaster Fox2 Pro USB joystick
- PNY Technologies NVIDIA GeForce 4 Ti4600
using NVIDIA v52.16 drivers
- The mission was flown using LOMAC Beta 15.