

Russian Invasion of Georgia

Russian SS-21 and SS-26 missiles used against Georgia

17 November, 2008

Regular updates can be found on the Georgia Update website:

<http://georgiaupdate.gov.ge/>

- In his November 5, 2008 address to the Federal Assembly of the Russian Federation, Russian President Dmitry Medvedev announced deployment of SS-26 “Iskander” 400 kilometer-range missiles in the Kaliningrad District, within range of Lithuania, Poland and Latvia, including Warsaw, Vilnius and Riga.
- Russia fired SS-26s, and their predecessor SS-21s, at civilian targets in Georgia during its August invasion of Georgia.
- Russia used the SS-21 during the Second Chechnya War, in particular, on 21 October 1999, two Russian missile believed to be SS-21s slammed into a crowded Grozny marketplace and a maternity ward, killing at least 143 persons.

SS-21 and SS-26 missile attacks on Georgian territory during the Russian invasion in August 2008

The extensive Russian bombardment of Georgian territory included five confirmed short-range surface-to-surface missile attacks with 9K79 “Tochka” (NATO: SS-21 SCARAB) and its modernized version, the 9M72 “Iskander” (NATO: SS-26 STONE). None of the targeted areas had any Georgian military installations or troop formations at the time of attack. The August 12 attack on Gori city center killed Dutch journalist Stan Storimans.

missile	Name of Area	Direct Distance from Tskhinvali and Tbilisi in kilometers	Date and time of attack
SS-21	Oni district	48/135	Date unknown; found unexploded
SS-21	Sinaguri	32/115	date Unknown; found unexploded
SS-26	Baku-Supsa Oil Pipeline (KP 27)	117/31	12.08.08; 11:30

SS-26	Gori	30/63	12.08.08; approx. 12:00
SS-21	Poti	189/261	08.08.08; 23:50

Moreover, Georgian authorities believe that Upper Abkhazia—now inaccessible due to Russian occupation—was subjected to SS-21 and SS-26 attacks.

On August 12 Gori city center was attacked by an SS-26, killing civilians, including Dutch journalist Stan Storimans

Press release of the Ministry of Foreign Affairs of the Kingdom of Netherlands

<http://www.minbuza.nl/en/news/newsflashes,2008/10/Dutch-cameraman-was-killed-by-Russian-cluster-bomb.html>

Dutch cameraman was killed by Russian cluster bomb

20 Oct 2008 | Dutch cameraman Stan Storimans, who was killed in the Georgian city of Gori on 12 August 2008, was the victim of a cluster munition. The munition was propelled by a type of rocket that is only found in Russia's military arsenal. That is the conclusion of the mission that Minister of Foreign Affairs Maxime Verhagen appointed to investigate the circumstances of Mr Storimans' death.

Mr Verhagen regards the findings as extremely serious. 'I have made that clear to the Russian authorities,' he said. 'Cluster munitions must not be used in this way. There were no troops present in Gori and innocent civilians were killed.'

Mr Verhagen is taking the initiative to prevent civilians being killed by cluster weapons in such circumstances in the future. On Thursday the Netherlands will raise this issue in the Permanent Council of the Organisation for Security and Cooperation in Europe (OSCE). This organisation, of which Russia and Georgia are members, deals with issues such as arms control. The Netherlands will call for a political statement to be issued in which member states pledge not to use cluster weapons in situations of this kind.

Mr Storimans was killed while reporting on the conflict between Russia and Georgia for RTL News. His colleague, reporter Jeroen Akkermans, received minor injuries. Mr Verhagen ordered an investigation after requests to the Georgian and Russian authorities failed to yield useful information regarding Mr Storimans' death. The Minister has personally spoken to Mr Storimans' family and the editors of RTL News about the findings.

A team of military and diplomatic experts headed by former ambassador A.P.R. Jacobovits de Szeged interviewed eyewitnesses, representatives of international organisations, military experts, and the Georgian

and Russian authorities. Technical and forensic evidence was also analysed, and various independent international media organisations made photo and video material available.

Eyewitnesses of the explosion in Gori

According to eyewitnesses interviewed by the Georgian Prosecutor's Office, an explosion was heard in the center of Gori at about 11:30 on August 12. The explosion was unexpected because no Russian or Georgian military (including aviation) was seen in the center of Gori. The eyewitnesses included local residents and a journalist of the Greek National Broadcasting Company.

International Press on SS-21 and SS-26 use against Georgia

- The Russian newspaper "Novaya Gazeta" on 09.09.2008 reported bombardment of the Georgian village of Sinaguri by Tochka SS-21. <http://www.novayagazeta.ru/news/318493.html>
- The Russian Human Rights organization "Memorial" conducted a fact finding mission in the Georgian-Russian conflict zone. The staff of "Memorial" took pictures of the Georgian village of Sinaguri attacked by a Russian SS-21. <http://www.memo.ru/hr/hotpoints/osetia/photorep/index.htm>
- At an August 10 press briefing by White House Press Secretary Dana Perino, Deputy National Security Advisor Jim Jeffrey and Senior Director for East Asian Affairs Dennis Wilder, Ambassador Jeffrey confirmed that Russian SS-21s entered Georgian Territory: *"In terms of how we've responded to this, the President was informed immediately on Friday, when we received news of the first two SS-21 Russian missile launchers into Georgian territory. He immediately -- this was at the Great Hall -- he immediately met with President Putin. They had a discussion. The President then engaged with his national security staff continuously over the last two days. He has spoken with -- again with Putin that evening. He then talked with President Medvedev yesterday evening, as well as President Saakashvili. Secretary Rice has spoken repeatedly with President Saakashvili, as well as with her Russian counterpart, Foreign Minister Lavrov, and many European leaders."* <http://www.whitehouse.gov/news/releases/2008/08/20080810-4.html>
- Online defense magazine "Defense Update" confirmed Russian use of SS-21s and SS-26s in Georgia. <http://www.defense-update.com/products/i/iskander.htm>
- The "New York Times" on November 6 confirmed the death of Dutch Journalist Stan Storimans in Gori as a result of a Russian SS-26 attack: *"And the Dutch Foreign Ministry said that a Russian cluster bomb killed a Dutch cameraman and four other people in an attack on the central square in Gori on Aug. 12. In a report released last month, the ministry said that an examination of forensic evidence, video and photographs indicated that a Russian SS-26 missile loaded with cluster munitions had caused the deaths"*. <http://www.nytimes.com/2008/11/06/world/europe/06cluster.html?partner=rssnyt&emc=rss>

- On August 21, AFP reported, “The SS 21 missile launcher, which the United States says Russia has moved into South Ossetia, is a battlefield medium-range [sic] tactical ballistic missile with a range from 70 to 120 kilometres (43 to 75 miles)” <http://afp.google.com/article/ALeqM5hjzs8qJNzCluzDwTXuyYWibfO9g>
- On October 20, Associated Press confirmed the death of Dutch Journalist Stan Storimans as a result of an SS-26 attack. http://news.yahoo.com/s/ap/20081020/ap_on_re_eu/eu_georgia_journalist_killed_2

Medvedev November 5 Address to the Federal Assembly of the Russian Federation

I would add something about what we have had to face in recent years: what is it? It is the construction of a global missile defence system, the installation of military bases around Russia, the unbridled expansion of NATO and other similar ‘presents’ for Russia – we therefore have every reason to believe that they are simply testing our strength.

Of course we will not let ourselves be dragged into an arms race. But we must take this into account in defence expenditures. And we will continue to reliably protect the safety of the citizens of Russia. Therefore I will now announce some of the measures that will be taken. In particular measures to effectively counter the persistent and consistent attempts of the current American administration to install new elements of a global missile defence system in Europe. For example, we had planned to decommission three missile regiments of a missile division deployed in Kozelsk from combat readiness and to disband the division by 2010. I have decided to abstain from these plans. Nothing will disband. Moreover, we will deploy the Iskander missile system in the Kaliningrad Region to be able, if necessary, to neutralise the missile defence system. Naturally, we envisage using the resources of the Russian Navy for these purposes as well. And finally, electronic jamming of the new installations of the U.S. missile defence system will be carried out from the territory of the same westernmost region, that is from Kaliningrad.

http://www.kremlin.ru/eng/speeches/2008/11/05/2144_type70029type82917type127286_208836.shtml

Background on the SS-26 “Iskander” and the SS-21 “Tochka”

According to “Defense Update” magazine, the 9M72 “Iskander” M (NATO SS-26 STONE) short-range ballistic missile currently in service with the Russian Armed Forces is among the most advanced surface-to-surface missiles available today. An earlier version is the 9K79 “Tochka” (NATO: SS-21 SCARAB).

<http://www.defense-update.com/products/i/iskander.htm>

The following systems information is reproduced from <http://www.globalsecurity.org/wmd/world/russia/ss-26.htm> and <http://www.globalsecurity.org/military/world/russia/ss-21.htm>

SS-26 Stone (Iskander)

Iskander (NATO Reporting name SS-26 Stone) is a solid fuel propelled, theater quasiballistic missile system produced in Russia.

The system is intended to use conventional warheads for the engagement of small and area targets, such as:

- hostile fire weapons (missile systems, multiple launch rocket systems, long-range artillery pieces);
- air and antimissile defense weapons, especially those located in relatively fixed sites;
- fixed- and rotary-wing aircraft at airfields;
- command posts and communications nodes;
- critical civilian infrastructure facilities;
- other vital small and area targets.

The missile system ensures:

- high probability of fire mission accomplishment in hostile active countermeasures environments;
- high probability of failure-proof functioning of the missile during its launch preparation and in flight;
- automatic computation and input of missile flight missions by the launcher devices;
- high tactical maneuverability and strategic mobility owing to transportability of the system vehicles by all types of transport;
- long service life and ease of operation.

The Iskander system is equipped with a solid-propellant single-stage guided missile 9M723K1 controlled throughout the entire flight path and provided with a no separable warhead.

In flight, the missile follows a non-purely-ballistic path, which includes such features as violent maneuvers in the terminal phase of flight and the release of decoys. The missile never leaves the atmosphere as it follows a relatively flat trajectory.

Russia has announced that it is contemplating positioning a regiment of the missiles in neighboring Belarus in response to US missile defense plans in Eastern Europe.

Range: ~400 km with a potential for extension.

Basic Characteristics

- Manufacturer: Kolomna KBM
- Launch range:
 - maximum: 400 km
 - minimum: 50 km
- Accuracy: 20 m CEP
- Burnout Velocity: ~2100 m/s
- Weight:
 - missile launch: 3,800 kg
 - payload: 480 kg

- Warhead: conventional (cluster, HE fragmentation, penetrating)
- Guidance system: inertial, GPS / GLONASS, optoelectronic homing head
- Chassis: wheeled, cross-country

▪ launcher: 40,000 kg

SS-21 SCARAB (9K79 Tochka)

The SS-21 SCARAB (9K79 Tochka) single-stage, short-range, tactical-ballistic missile is transported and fired from the 9P129 6x6 wheeled transporter erector launcher. It is supported by a tactical transloader (9T218) and a 9T238 missile transporter trailer towed by a ZIL-131 truck. The 9P129 TEL crew compartment is in the forward section and the missile compartment behind. During transport the missile is enclosed with the warhead in a temperature-controlled casing.

The SS-21 SCARAB missile (9M79) has a maximum range of 70 km and a CEP of 160 meters, while the improved composite propellant 9M79-1 (Tochka-U) has a maximum range of 120 km. The basic warhead is the 9N123F HE-Frag warhead which has 120 kg of high explosives. The 9N123K submunition warhead can probably carry either bomblets or mines. The SS-21 can also carry the AA60 tactical nuclear warhead. Other warheads are believed to include chemical, terminally guided warhead, and a smart-munition bomblet warhead. In 1981, the SS-21, a guided missile (providing improvement in both range and accuracy), began replacing the FROG in forward-deployed divisions, and 140 were deployed as of 1988. Division-level SS-21 battalions were being consolidated into brigades in Soviet armies in East Germany.

On 21 October 1999 US satellites [reportedly the Defense Support Program] tracked two Russian short-range ballistic missile launched from the Russian city of Mozdok some 60 miles northeast of Grozny. The missiles slammed into a crowded Grozny marketplace and a maternity ward, killing at least 143 persons, according to reports from the region. The missiles are believed by intelligence analysts to have been SS-21s.

USA Code Name:	SS-21			
Nato Code Name:	Scarab			
Russian Designation:	9K79			
Range:	120 Km			
Stages:	1			
Fuel:	Solid			
Inservice: Current System				
Notes:	Replacement for FROG -7 System. Very Mobile			
Type	Tactical ballistic missile			
Place of origin	Soviet Union			
Service history In service	1976-present	/	SS-21	Scarab A
	1986-present / SS-21 Scarab B			
Manufacturer	Kolomna OKB			
Specifications				
Weight	2,000 kg (4,409 lb)	/	SS-21	Scarab A
	2,010 kg (4,431 lb) / SS-21 Scarab B			
Length	6.4 m (30 ft)			

Diameter	0.65 (2.1 ft)
Warhead	Chemical, 100 kT nuclear warhead, EMP , or fragmentation filling
Engine	Single-state solid propellant
Operational range	70 km (43 mi) / SS-21 Scarab A 120 km (74 mi) / SS-21 Scarab B
Speed	1.8 km/s
Guidance system	Inertial with GLONASS
Launch platform	Mobile launcher vehicle

Photos

SS-21 Poti



SS-21 Sinaguri



SS-21 Oni



SS-26 Gori



SS-26 Baku-Supsa pipeline

