

21/10/2019	1	Tank (T-64)	In a residential area of Novohryhorivka (61km north-east of Donetsk)	Mini-UAV
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Beyond withdrawal lines but outside of designated storage sites

Date	No. of weapons	Type of weapon	Location	Source of observation
Government-controlled areas				
22/11/2019	22	Tank (T-72)	Near Zachativka (74km south-west of Donetsk)	Patrol

Table of military and military-type presence in the security zone⁷

Date	No.	Type	Location	Source of observation
Government-controlled areas				
22/11/2019	1	Armoured personnel carrier (BTR-60)	Near Novobakhmutivka (28km north of Donetsk)	Patrol
	1	Probable anti-tank guided missile system (type undetermined)	Near Marinka (23km south-west of Donetsk)	
	1	New position (bunker)		
Non-government-controlled areas				
20/11/2019	1	Infantry fighting vehicle (BMP-1)	Near Styla (34km south of Donetsk)	Mid-range UAV
21/11/2019	1	Armoured personnel carrier (BTR-80)	In Novohryhorivka (61km north-east of Donetsk)	Mini-UAV
	-	New trench (40m in length) (not seen in imagery from 12 October 2019)	Near Raivka (16km north-west of Luhansk)	
22/11/2019	1	Infantry fighting vehicle (BMP-2)	In a residential area of Kadiivka (formerly Stakhanov, 50km west of Luhansk)	Patrol

Table of ceasefire violations as of 22 November 2019⁸

⁷ The hardware mentioned in this section is not proscribed by the provisions of the Minsk agreements on the withdrawal of weapons.

⁸ The table only includes ceasefire violations directly observed by the SMM and it may include those also assessed to be live-fire exercises, controlled detonations, etc. Details provided – in terms of distance, direction, weapons-type, etc. – are based on assessments provided by monitors on the ground, and are not always necessarily precise. When information is not known (indicated with an “N/K”), the SMM was unable to ascertain such information due to distance, weather conditions and/or other considerations. Ceasefire violations recorded by more than one patrol and assessed to be the same are entered only once.

SMM position	Event location	Means	No.	Observation	Description	Weapon	Date, time
SMM camera in Berezove (government-controlled, 31km SW of Donetsk)	2-4km SE	Recorded	1	Explosion	Undetermined	N/K	21-Nov, 22:08
SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)	2-4km SE	Recorded	3	Projectile	NE to SW	N/K	21-Nov, 20:19
	2-4km SE	Recorded	6	Projectile	NE to SW	N/K	21-Nov, 20:20
	2-4km SE	Recorded	12	Projectile	NE to SW	N/K	21-Nov, 20:21
	2-4km SE	Recorded	3	Projectile	SW to NE	N/K	21-Nov, 20:25
	2-4km SE	Recorded	3	Projectile	NE to SW	N/K	21-Nov, 20:58
	2-4km SE	Recorded	11	Projectile	NE to SW	N/K	21-Nov, 22:35
	2-4km SE	Recorded	2	Projectile	NE to SW	N/K	22-Nov, 00:55
	3-5km SE	Recorded	1	Projectile	SW to NE	N/K	22-Nov, 16:48
SMM camera at Donetsk Filtration Station (15km N of Donetsk)	200-500m S	Recorded	1	Projectile	S to N	N/K	22-Nov, 16:39
SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk)	3-5km ESE	Recorded	3	Projectile	NNE to SSW	N/K	21-Nov, 19:31
	3-5km ESE	Recorded	1	Explosion	outgoing	N/K	21-Nov, 21:28
	3-5km ESE	Recorded	1	Projectile	SSW to NNE (subsequent to previous event)	N/K	21-Nov, 21:28
	3-5km ESE	Recorded	1	Explosion		N/K	21-Nov, 21:29
	3-5km ESE	Recorded	1	Projectile	SSW to NNE (subsequent to previous event)	N/K	21-Nov, 21:29
	3-5km SE	Recorded	1	Projectile	SSW to NNE	N/K	21-Nov, 21:39
	3-5km ESE	Recorded	1	Projectile	NNW to SSE	N/K	21-Nov, 22:01
	3-5km ESE	Recorded	5	Projectile	SW to NE	N/K	21-Nov, 23:20
	3-5km ESE	Recorded	1	Projectile	WNW to ESE	N/K	21-Nov, 23:21
	3-5km ESE	Recorded	1	Projectile	SW to NE	N/K	21-Nov, 23:21
	3-5km ESE	Recorded	2	Projectile	NNE to SSW	N/K	22-Nov, 00:46
	2-4km ESE	Recorded	3	Projectile	WSW to ENE	N/K	22-Nov, 02:19
	2-4km ESE	Recorded	2	Explosion	Undetermined	N/K	22-Nov, 02:19
	2-4km ESE	Recorded	2	Projectile	WSW to ENE	N/K	22-Nov, 05:21
		5-7km SE	Recorded	2	Projectile	W to E	N/K
	5-7km SE	Recorded	8	Projectile	W to E	N/K	22-Nov, 18:58
SMM camera E of Lomakyne (government-controlled, 90km S of Donetsk)	5-7km ESE	Recorded	8	Projectile	N to S (also recorded by the SMM camera in Shyrokyne)	N/K	21-Nov, 20:33
	5-7km E	Recorded	2	Explosion	Undetermined (also recorded by the SMM camera in Shyrokyne)	N/K	21-Nov, 21:14
	5-7km E	Recorded	1	Projectile	N to S	N/K	21-Nov, 21:14
	5-7km E	Recorded	1	Explosion	Airburst (subsequent to previous event)	N/K	21-Nov, 21:14
	5-7km E	Recorded	2	Explosion	Undetermined (also recorded by the SMM camera in Shyrokyne)	N/K	21-Nov, 21:28
	5-7km E	Recorded	1	Projectile	N to S	N/K	21-Nov, 21:28
	5-7km E	Recorded	1	Explosion	Undetermined (also recorded by the SMM camera in Shyrokyne)	N/K	21-Nov, 21:29

	5-7km E	Recorded	1	Projectile	N to S	N/K	21-Nov, 21:29
	5-7km E	Recorded	1	Projectile	N to S	N/K	21-Nov, 21:39
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	21-Nov, 22:50
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	21-Nov, 22:51
	2-4km ESE	Recorded	1	Projectile	S to N	N/K	21-Nov, 22:52
SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk)	2-4km ENE	Recorded	1	Projectile	N to S	N/K	21-Nov, 22:34
SMM camera 1km SW of Shyrokyne (government-controlled, 100km S of Donetsk)	1-2km N	Recorded	3	Burst	E to W	N/K	21-Nov, 20:05
	1-2km N	Recorded	1	Projectile	SE to NW	N/K	21-Nov, 20:08
	5-7km N	Recorded	25	Projectile	WSW to ENE (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:17
	5-7km N	Recorded	15	Projectile	WSW to ENE (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:18
	5-7km N	Recorded	5	Projectile	WSW to ENE (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:25
	5-7km N	Recorded	1	Projectile	WSW to ENE (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:30
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	21-Nov, 20:30
	5-7km N	Recorded	1	Projectile	WSW to ENE	N/K	21-Nov, 20:31
	5-7km N	Recorded	18	Projectile	WSW to ENE (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:34
	5-7km N	Recorded	1	Explosion	Undetermined (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:34
	5-7km N	Recorded	11	Projectile	W to E (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:35
	5-7km N	Recorded	1	Explosion	Undetermined (subsequent to previous event)	N/K	21-Nov, 20:35
	5-7km N	Recorded	16	Projectile	W to E (also recorded by the SMM camera in Lomakyne)	N/K	21-Nov, 20:43
	5-7km N	Recorded	1	Explosion	Undetermined	N/K	21-Nov, 21:01
	5-7km N	Recorded	5	Projectile	W to E	N/K	21-Nov, 21:04
	4-6km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 16:17
	4-6km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 16:34
	4-6km NNE	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 16:34
	2-4km N	Recorded	1	Projectile	E to W	N/K	22-Nov, 17:01
	3-6km N	Recorded	1	Explosion	Undetermined	N/K	22-Nov, 17:18
	3-6km N	Recorded	2	Explosion	Undetermined	N/K	22-Nov, 18:13
	3-6km N	Recorded	1	Projectile	In vertical flight	N/K	22-Nov, 18:13
	3-6km N	Recorded	1	Illumination flare	In vertical flight (also recorded by	N/K	22-Nov, 18:15

					the SMM camera in Lomakyne)		
	3-5km N	Recorded	2	Projectile	E to W	N/K	22-Nov, 18:28
	3-5km N	Recorded	1	Projectile	W to E	N/K	22-Nov, 18:30
SE part of Avdiivka (government-controlled, 17km N of Donetsk)	2-3km E	Heard	12	Shot		Small arms	22-Nov, 09:25
	700m ESE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 13:35
About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk)	3-4km SW	Heard	1	Explosion	Undetermined	N/K	22-Nov, 13:46
2km SW of Pyshchevyk (government-controlled, 84km S of Donetsk)	1.5km SE	Heard	6	Burst		HMG	22-Nov, 10:10
	1.5km SE	Heard	2	Burst		HMG	22-Nov, 10:15
About 2.6km SSE of Lomakyne (government-controlled, 93km S of Donetsk)	2-4km NE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 11:12
Svitlodarsk (government-controlled, 57km NE of Donetsk)	3-4km SE	Heard	18	Burst		HMG	21-Nov, 19:16-19:20
	3-4km SE	Heard	16	Burst		HMG	21-Nov, 19:22-19:25
	2-3km SE	Heard	8	Burst		Small arms	21-Nov, 19:23-19:26
	3-4km SE	Heard	2	Burst		HMG	21-Nov, 19:29
	3-4km SE	Heard	4	Burst		HMG	21-Nov, 19:34
	4-6km S	Heard	3	Explosion	Undetermined	N/K	21-Nov, 19:46
	4-6km S	Heard	6	Explosion	Undetermined	N/K	21-Nov, 19:50-19:53
	3-5km S	Heard	3	Explosion	Undetermined	N/K	21-Nov, 19:54
	3-5km S	Heard	4	Explosion	Undetermined	N/K	21-Nov, 19:56
	3-5km SE	Heard	4	Explosion	Undetermined	N/K	21-Nov, 20:06-20:07
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	21-Nov, 20:42
	2-3km SE	Heard	11	Burst		Small arms	21-Nov, 20:43
	3-5km SE	Heard	1	Explosion	Undetermined	N/K	21-Nov, 20:46
	2-3km SE	Heard	12	Burst		Small arms	21-Nov, 20:46-20:49
	3-5km S	Heard	1	Explosion	Undetermined	N/K	21-Nov, 20:56
	3-5km NE	Heard	1	Explosion	Undetermined	N/K	22-Nov, 15:35
	4-6km SW	Heard	5	Explosion	Undetermined	N/K	22-Nov, 15:52
	4-6km SW	Heard	1	Explosion	Undetermined	N/K	22-Nov, 15:54
	4-6km SE	Heard	3	Explosion	Undetermined	N/K	22-Nov, 15:56
	4-6km SE	Heard	3	Explosion	Undetermined	N/K	22-Nov, 16:01
3-5km SE	Heard	13	Explosion	Undetermined	N/K	22-Nov, 16:03-16:05	
2-4km SE	Heard	3	Burst		HMG	22-Nov, 16:08	

	2-4km SE	Heard	3	Burst		HMG	22-Nov, 16:08
	3-5km SE	Heard	2	Explosion	Undetermined	N/K	22-Nov, 17:40
NW edge of Horlivka (non-government controlled, 39km NE of Donetsk)	2-4km N	Heard	1	Explosion	Undetermined	N/K	22-Nov, 10:04
N edge of Horlivka (non-government controlled, 39km NE of Donetsk)	4-6km NNW	Heard	1	Explosion	Undetermined	N/K	22-Nov, 11:07
E edge of Zalizne (government-controlled, 42km NE of Donetsk)	5-6km SSE	Heard	9	Explosion	Undetermined	N/K	22-Nov, 10:41-10:45
About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)	5-6km S	Heard	1	Explosion	Undetermined	N/K	22-Nov, 13:48
SMM camera in Kriakivka (government-controlled, 38km NW of Luhansk)	4-6km SW	Recorded	10	Projectile	NNW to SSE	N/K	22-Nov, 18:00
	4-6km SW	Recorded	12	Projectile	NNW to SSE	N/K	22-Nov, 18:01
N edge of Popasna (government-controlled, 69km W of Luhansk)	5-6km ESE	Heard	3	Explosion	Undetermined	N/K	21-Nov, 20:08
Holubivske (non-government-controlled, 51km W of Luhansk)	4-5km NNE	Heard	37	Explosion	Undetermined	N/K	22-Nov, 11:15-11:33
	4-5km NNE	Heard	58	Burst		N/K	22-Nov, 11:15-11:33