

**Table of ceasefire violations as of 17 October 2019<sup>9</sup>**

| SMM position  | Event location | Means    | No.          | Observation        | Description  | Weapon                                     | Date, time    |  |
|---|----------------|----------|--------------|--------------------|--|--|---------------|--|
| SMM camera in Berezove (government-controlled, 31km SW of Donetsk)        | 4-6km SSE      | Recorded | 2            | Projectile         | WNW to ESE   | N/K  | 16-Oct, 18:02 |  |
|   | 4-6km ESE      | Recorded | 3            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 19:04 |  |
|   |                |          |              |                    |  | Undetermined, subsequent to previous event |               |  |
|   | 4-6km ESE      | Recorded | 3            | Explosion          |  | N/K  | 16-Oct, 19:04 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WNW to ESE   | N/K  | 16-Oct, 19:12 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:12 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:12 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Outgoing   | N/K  | 16-Oct, 19:13 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WNW to ESE   | N/K  | 16-Oct, 19:13 |  |
|   | 4-6km SE       | Recorded | 4            | Projectile         | NW to SE   | N/K  | 16-Oct, 19:13 |  |
|   | 4-6km SE       | Recorded | 2            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:13 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Outgoing   | N/K  | 16-Oct, 19:14 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WNW to ESE   | N/K  | 16-Oct, 19:14 |  |
|   |                |          |              |                    |  | Undetermined, subsequent to previous event |               |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          |  | N/K  | 16-Oct, 19:14 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Outgoing   | N/K  | 16-Oct, 19:17 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WNW to ESE   | N/K  | 16-Oct, 19:17 |  |
|   |                |          |              |                    |  | Undetermined, subsequent to previous event |               |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          |  | N/K  | 16-Oct, 19:17 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 19:18 |  |
|   | 4-6km SE       | Recorded | 1            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:18 |  |
|   | 4-6km SE       | Recorded | 10           | Projectile         | WSW to ENE   | N/K  | 16-Oct, 19:19 |  |
|   | 4-6km SE       | Recorded | 2            | Explosion          | Airburst   | N/K  | 16-Oct, 19:21 |  |
|   | 4-6km SSE      | Recorded | 1            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:25 |  |
|   | 4-6km SSE      | Recorded | 1            | Explosion          | Undetermined   | N/K  | 16-Oct, 19:26 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 19:26 |  |
|   | 4-6km SE       | Recorded | 1            | Muzzle flash       |  | N/K  | 16-Oct, 19:48 |  |
|   | 4-6km SE       | Recorded | 1            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 19:48 |  |
| 2-4km SE  | Recorded       | 1        | Muzzle flash |                    | N/K  | 16-Oct, 20:35                              |               |  |
| 2-4km SSE   | Recorded       | 3        | Projectile   | ESE to WNW         | N/K  | 17-Oct, 18:27                              |               |  |
| 2-4km SSE   | Recorded       | 3        | Projectile   | ESE to WNW         | N/K  | 17-Oct, 18:27                              |               |  |
| SMM camera in Chermalyk (government-controlled, 77km S of Donetsk)        |                |          |              | Illumination flare | In vertical flight   | N/K  | 16-Oct, 18:17 |  |
|   | 8-10km SE      | Recorded | 1            |                    |  |  |               |  |
|   | 2-4km SSE      | Recorded | 1            | Projectile         | NW to SE   | N/K  | 16-Oct, 19:24 |  |
|   | 2-4km SSE      | Recorded | 3            | Projectile         | W to E   | N/K  | 16-Oct, 19:25 |  |
|   | 2-3km SSE      | Recorded | 3            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 23:42 |  |
|   | 2-3km SSE      | Recorded | 2            | Projectile         | WSW to ENE   | N/K  | 16-Oct, 23:43 |  |
|   | 2-3km SSE      | Recorded | 1            | Projectile         | WSW to ENE   | N/K  | 17-Oct, 00:04 |  |
| 2-3km SE  | Recorded       | 9        | Projectile   | ENE to WSW         | N/K  | 17-Oct, 02:34                              |               |  |
| SMM camera 1.5km NE of Hnutove (government-controlled, 90km S of Donetsk) |                |          |              |                    | In vertical flight (also recorded by the SMM cameras in Chermalyk and Shyrokyne) |  |               |  |
|   | 2-4km E        | Recorded | 1            | Illumination flare |  | N/K  | 16-Oct, 18:17 |  |
|   | 2-4km E        | Recorded | 11           | Projectile         | SW to NE   | N/K  | 16-Oct, 20:32 |  |

<sup>9</sup> 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.

|  |           |          |     |              |                                       |     |               |
|--|-----------|----------|-----|--------------|---------------------------------------|-----|---------------|
|  | 3-5km E   | Recorded | 2   | Explosion    | Undetermined                          | N/K | 16-Oct, 20:32 |
|  | 2-4km E   | Recorded | 1   | Projectile   | NW to SE                              | N/K | 16-Oct, 20:32 |
|  | 2-4km E   | Recorded | 1   | Explosion    | Impact, subsequent to previous event  | N/K | 16-Oct, 20:33 |
|  | 2-4km E   | Recorded | 2   | Projectile   | SW to NE                              | N/K | 16-Oct, 20:32 |
| SMM camera in Krasnohorivka (government-controlled, 21km W of Donetsk)                     | 2-3km ESE | Recorded | 2   | Projectile   | NNE to SSW                            | N/K | 16-Oct, 23:41 |
|  | 2-3km ESE | Recorded | 1   | Projectile   | WSW to ENE                            | N/K | 16-Oct, 23:41 |
| SMM camera at entry-exit checkpoint in Maiorsk (government-controlled, 45km NE of Donetsk) | 2-3km ENE | Recorded | 3   | Projectile   | N to S                                | N/K | 17-Oct, 01:56 |
|  | 2-3km ENE | Recorded | 2   | Projectile   | N to S                                | N/K | 17-Oct, 04:09 |
| SMM camera at entry-exit checkpoint in Marinka (government-controlled, 23km SW of Donetsk) | 1-2km NNE | Recorded | 15  | Projectile   | W to E                                | N/K | 16-Oct, 21:21 |
|  | 1-2km NNE | Recorded | 1   | Projectile   | SW to NE                              | N/K | 16-Oct, 21:21 |
|  | 1-2km NNE | Recorded | 1   | Projectile   | S to N                                | N/K | 16-Oct, 21:21 |
|  | 1-2km NNE | Recorded | 13  | Projectile   | SW to NE                              | N/K | 16-Oct, 21:22 |
|  | 1-2km NNE | Recorded | 28  | Projectile   | W to E                                | N/K | 16-Oct, 21:22 |
|  | 1-2km N   | Recorded | 9   | Projectile   | W to E                                | N/K | 16-Oct, 21:23 |
|  | 1-2km N   | Recorded | 114 | Projectile   | SW to NE                              | N/K | 16-Oct, 21:36 |
|  | 1-2km N   | Recorded | 16  | Projectile   | SW to NE                              | N/K | 16-Oct, 21:37 |
|  | 2-3km S   | Recorded | 1   | Projectile   | NE to SW                              | N/K | 16-Oct, 18:19 |
|  | 2-3km SSE | Recorded | 19  | Projectile   | E to W                                | N/K | 16-Oct, 19:37 |
|  | 4-6km SSE | Recorded | 6   | Projectile   | W to E                                | N/K | 16-Oct, 22:29 |
|  | 2-4km SSE | Recorded | 1   | Muzzle flash |                                       | N/K | 16-Oct, 20:32 |
|  | 2-4km SSE | Recorded | 1   | Projectile   | W to E (subsequent to previous event) | N/K | 16-Oct, 20:32 |
|  | 2-4km SSE | Recorded | 4   | Projectile   | W to E                                | N/K | 16-Oct, 20:32 |
|  | 2-4km SSE | Recorded | 1   | Muzzle flash |                                       | N/K | 16-Oct, 20:33 |
|  | 2-4km SSE | Recorded | 1   | Projectile   | W to E (subsequent to previous event) | N/K | 16-Oct, 20:33 |
|  | 2-4km SSE | Recorded | 1   | Explosion    | Impact, subsequent to previous event  | N/K | 16-Oct, 20:33 |
| SMM camera at entry-exit checkpoint in Pyshevyk (government-controlled, 84km S of Donetsk) | 2-4km SSE | Recorded | 12  | Projectile   | W to E                                | N/K | 16-Oct, 20:33 |
|  | 2-4km SSE | Recorded | 12  | Projectile   | E to W                                | N/K | 16-Oct, 21:41 |
|  | 4-6km S   | Recorded | 17  | Projectile   | W to E                                | N/K | 16-Oct, 21:45 |
|  | 4-6km S   | Recorded | 4   | Projectile   | W to E                                | N/K | 16-Oct, 21:50 |
|  | 4-6km S   | Recorded | 9   | Projectile   | W to E                                | N/K | 16-Oct, 21:55 |
|  | 4-6km S   | Recorded | 3   | Projectile   | E to W                                | N/K | 16-Oct, 21:55 |
|  | 4-6km S   | Recorded | 4   | Projectile   | W to E                                | N/K | 16-Oct, 21:56 |
|  | 4-6km S   | Recorded | 2   | Projectile   | W to E                                | N/K | 16-Oct, 21:57 |
|  | 4-6km S   | Recorded | 1   | Explosion    | Undetermined                          | N/K | 16-Oct, 21:57 |
|  | 4-6km S   | Recorded | 1   | Burst        | W to E (approximately 15 rounds)      | N/K | 16-Oct, 21:58 |
|  | 4-6km S   | Recorded | 3   | Projectile   | E to W                                | N/K | 16-Oct, 22:04 |
|  | 4-6km S   | Recorded | 5   | Projectile   | W to E                                | N/K | 16-Oct, 22:32 |
|  | 4-6km S   | Recorded | 47  | Projectile   | W to E                                | N/K | 16-Oct, 22:30 |
|  | 4-6km S   | Recorded | 2   | Projectile   | W to E                                | N/K | 16-Oct, 22:32 |
|  | 4-6km S   | Recorded | 3   | Projectile   | W to E                                | N/K | 17-Oct, 23:33 |
|  | 4-6km S   | Recorded | 1   | Projectile   | E to W                                | N/K | 16-Oct, 22:51 |
|  | 4-6km S   | Recorded | 1   | Explosion    | Undetermined                          | N/K | 16-Oct, 22:51 |
|  | 4-6km S   | Recorded | 1   | Explosion    | Impact                                | N/K | 16-Oct, 22:51 |

|  |           |          |    |              |   |               |               |
|--|-----------|----------|----|--------------|---|---------------|---------------|
|  | 4-6km S   | Recorded | 3  | Projectile   | W to E  | N/K           | 16-Oct, 22:52 |
|  | 4-6km S   | Recorded | 3  | Projectile   | W to E  | N/K           | 16-Oct, 22:53 |
|  | 4-6km S   | Recorded | 5  | Projectile   | W to E  | N/K           | 16-Oct, 22:54 |
|  | 4-6km S   | Recorded | 2  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 22:54 |
|  | 4-6km S   | Recorded | 7  | Projectile   | W to E  | N/K           | 16-Oct, 23:19 |
|  | 4-6km S   | Recorded | 3  | Projectile   | W to E  | N/K           | 16-Oct, 23:20 |
|  | 4-6km S   | Recorded | 12 | Projectile   | W to E  | N/K           | 16-Oct, 23:21 |
|  | 4-6km S   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:21 |
|  | 4-6km S   | Recorded | 1  | Projectile   | ENE to WSW                                      | N/K           | 16-Oct, 23:23 |
|  | 4-8km S   | Recorded | 2  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:38 |
|  | 4-6km S   | Recorded | 1  | Projectile   | SE to NW  | N/K           | 16-Oct, 23:38 |
|  | 4-6km S   | Recorded | 15 | Projectile   | W to E  | N/K           | 17-Oct, 00:25 |
|  | 6-8km S   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 17-Oct, 01:01 |
|  | 6-8km S   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 17-Oct, 01:02 |
|  | 4-6km S   | Recorded | 1  | Projectile   | W to E  | N/K           | 17-Oct, 01:02 |
|  | 4-8km S   | Recorded | 7  | Projectile   | W to E  | N/K           | 17-Oct, 01:11 |
|  | 4-6km S   | Recorded | 1  | Projectile   | In vertical flight                              | N/K           | 17-Oct, 01:12 |
|  | 4-6km S   | Recorded | 14 | Projectile   | W to E  | N/K           | 17-Oct, 01:16 |
|  | 4-6km S   | Recorded | 3  | Projectile   | NW to SE  | N/K           | 17-Oct, 01:16 |
|  | 4-6km S   | Recorded | 3  | Projectile   | In vertical flight                              | N/K           | 17-Oct, 01:16 |
|  | 4-6km S   | Recorded | 1  | Projectile   | W to E  | N/K           | 17-Oct, 02:15 |
|  | 4-6km S   | Recorded | 3  | Projectile   | W to E  | N/K           | 17-Oct, 02:18 |
|  | 4-6km S   | Recorded | 2  | Projectile   | W to E  | N/K           | 17-Oct, 02:19 |
|  | 2-4km S   | Recorded | 1  | Projectile   | W to E  | N/K           | 17-Oct, 02:25 |
|  | 4-6km S   | Recorded | 2  | Projectile   | In vertical flight                              | N/K           | 17-Oct, 03:20 |
|  | 4-6km S   | Recorded | 6  | Projectile   | W to E  | N/K           | 17-Oct, 03:21 |
|  | 4-6km S   | Recorded | 1  | Projectile   | In vertical flight                              | N/K           | 17-Oct, 03:21 |
|  | 2-4km S   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 17-Oct, 05:28 |
|  | 2-4km N   | Recorded | 1  | Projectile   | W to E  | N/K           | 16-Oct, 18:27 |
|  | 2-4km N   | Recorded | 1  | Projectile   | W to E  | N/K           | 16-Oct, 18:30 |
|  | 2-4km N   | Recorded | 1  | Projectile   | W to E  | N/K           | 16-Oct, 18:32 |
|  | 2-4km NNE | Recorded | 13 | Projectile   | WNW to ESE                                      | N/K           | 16-Oct, 18:36 |
|  | 2-4km NE  | Recorded | 9  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 18:43 |
|  | 2-4km NE  | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 19:13 |
|  | 4-6km N   | Recorded | 1  | Projectile   | W to E  | N/K           | 16-Oct, 19:51 |
|  | 1-3km N   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 21:57 |
|  | 1-3km N   | Recorded | 1  | Projectile   | ESE to WNW                                      | N/K           | 16-Oct, 21:57 |
|  | 2-4km N   | Recorded | 2  | Projectile   | WNW to ESE                                      | N/K           | 16-Oct, 21:59 |
|  | 4-6km N   | Recorded | 2  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 22:48 |
|  | 4-6km N   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 22:51 |
|  | 4-6km N   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 22:54 |
|  | 2-4km NE  | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:17 |
|  | 2-4km NE  | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:21 |
|  | 2-4km NE  | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:22 |
|  | 1-3km N   | Recorded | 2  | Projectile   | SE to NW  | N/K           | 16-Oct, 23:38 |
|  | 4-6km N   | Recorded | 2  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:38 |
|  | 4-6km N   | Recorded | 5  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:40 |
|  | 4-6km N   | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:41 |
|  | 2-4km NNE | Recorded | 1  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:43 |
|  | 2-4km NNE | Recorded | 3  | Explosion    | Undetermined                                    | N/K           | 16-Oct, 23:44 |
|  | 2-4km N   | Recorded | 3  | Projectile   | WSW to ENE                                      | N/K           | 16-Oct, 23:44 |
|  | 2-4km N   | Recorded | 1  | Muzzle flash |   | N/K           | 17-Oct, 00:17 |
|  | 2-4km N   | Recorded | 1  | Projectile   | WNW to ESE<br>(subsequent to<br>previous event) | N/K           | 17-Oct, 00:17 |
|  | 2-4km N   | Recorded | 4  | Explosion    | Undetermined                                    | N/K           | 17-Oct, 03:53 |
|  | 4-6km NE  | Heard    | 1  | Explosion    | Undetermined                                    | N/K           | 17-Oct, 11:14 |
|  | 1-2km SE  | Heard    | 2  | Burst        |   | Small<br>arms | 17-Oct, 11:17 |
|  | 2km SE    | Heard    | 4  | Burst        |   | HMG           | 17-Oct, 11:18 |
|  | 2-3km SE  | Heard    | 6  | Explosion    | Undetermined                                    | Cannon        | 17-Oct, 11:22 |

|   |           |       |    |           |  |            |                     |
|---|-----------|-------|----|-----------|--|------------|---------------------|
|   |           |       |    |           |  | 30mm       |                     |
|   | 1-2km SE  | Heard | 5  | Burst     |  | Small arms | 17-Oct, 14:37       |
|   | 1-2km SE  | Heard | 13 | Burst     |  | Small arms | 17-Oct, 14:43-14:45 |
|   | 1-2km SE  | Heard | 4  | Shot      |  | Small arms | 17-Oct, 14:47       |
| Donetsk central railway station(non-government-controlled, 6km NW of Donetsk)                     | 5-7km SW  | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:04       |
| About 1.8km N of Petrivske (non-government-controlled, 41km S of Donetsk)                         | 3-4km S   | Heard | 4  | Burst     | Assessed as outside the disengagement area | HMG        | 17-Oct, 13:00       |
|   | 3-4km SW  | Heard | 1  | Shot      | Assessed as inside the disengagement area  | Small arms | 17-Oct, 13:20       |
|   | 3-4km SW  | Heard | 1  | Shot      | Assessed as inside the disengagement area  | Small arms | 17-Oct, 13:24       |
| About 1km NW of the railway station in Yasynuvata (non-government-controlled, 16km NE of Donetsk) | 2-3km SW  | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 09:35       |
|   | 2-3km SW  | Heard | 3  | Explosion | Undetermined                               | N/K        | 17-Oct, 09:45       |
|   | 1km W     | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:50       |
|   | 2km SW    | Heard | 7  | Burst     |  | HMG        | 17-Oct, 14:42       |
|   | 2km SW    | Heard | 7  | Burst     |  | HMG        | 17-Oct, 14:45       |
|   | 2km SW    | Heard | 2  | Burst     |  | HMG        | 17-Oct, 14:47       |
| Horlivka (non-government-controlled, 39km NE of Donetsk)  | 3-5km SW  | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 00:28       |
|   | 3-5km SW  | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 00:32       |
|   | 3-5km SSW | Heard | 3  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:59-11:05 |
| W edge of Horlivka (non-government-controlled, 39 km NE of Donetsk)                               | 1-2km SE  | Heard | 3  | Burst     |  | HMG        | 17-Oct, 10:01       |
|   | 1-2km SSW | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:08       |
|   | 1-2km SE  | Heard | 5  | Burst     |  | HMG        | 17-Oct, 10:13       |
|   | 1-2km SE  | Heard | 3  | Burst     |  | HMG        | 17-Oct, 10:36       |
|   | 1-2km SE  | Heard | 3  | Burst     |  | HMG        | 17-Oct, 10:45       |
|   | 2-3km SSW | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:48       |
|   | 2-3km SSW | Heard | 2  | Explosion | Undetermined                               | N/K        | 17-Oct, 10:58       |
|   | 2-3km SSW | Heard | 5  | Burst     |  | HMG        | 17-Oct, 10:58       |
|   | 1-2km SSW | Heard | 1  | Explosion | Undetermined                               | N/K        | 17-Oct, 11:01       |
|   | 2-3km SSW | Heard | 5  | Burst     |  | HMG        | 17-Oct, 11:46       |
| Svitlodarsk (government-controlled, 57km NE of Donetsk)   | 4-5km SSE | Heard | 2  | Explosion | Undetermined                               | N/K        | 16-Oct, 20:11       |
|   | 4-5km SSE | Heard | 1  | Explosion | Undetermined                               | N/K        | 16-Oct, 20:44       |
|   | 2-3km SE  | Heard | 1  | Burst     |  | HMG        | 16-Oct, 20:45       |
|   | 4-5km SE  | Heard | 1  | Explosion | Undetermined                               | N/K        | 16-Oct, 21:03       |
|   | 2-3km SE  | Heard | 3  | Burst     |  | HMG        | 16-Oct, 21:03       |
|   | 4-6km WSW | Heard | 1  | Explosion | Undetermined                               | N/K        | 16-Oct, 21:50       |
|   | 2-3km SSE | Heard | 14 | Burst     |  | HMG        | 16-Oct, 22:10-22:12 |
|   | 2-3km SSE | Heard | 7  | Burst     |  | HMG        | 16-Oct, 22:20-22:22 |
|   | 2-3km SSE | Heard | 2  | Explosion | Undetermined                               | N/K        | 16-Oct, 22:22       |
|   | 2-3km SSE | Heard | 3  | Burst     |  | HMG        | 16-Oct, 22:24       |
|   | 2-3km SSE | Heard | 5  | Burst     |  | HMG        | 16-Oct, 22:59-23:00 |
|   | 2-3km SSE | Heard | 8  | Burst     |  | HMG        | 16-Oct, 23:09-23:10 |
|   | 2-3km SSE | Heard | 18 | Burst     |  | HMG        | 16-Oct, 23:33-      |

|  |  |               |    |           |              |   |                     |
|--|--|---------------|----|-----------|--------------|---|---------------------|
|  |  |               |    |           |              |   | 23:36               |
|  | 2-3km SSE  | Heard         | 7  | Burst     |              | HMG   | 16-Oct, 22:57-22:58 |
|  | 3-5km SSE  | Heard         | 16 | Explosion | Undetermined | N/K   | 17-Oct, 17:22-17:26 |
|  | 3-5km SSE  | Heard         | 11 | Explosion | Undetermined | N/K   | 17-Oct, 17:28-17:32 |
|  | 3-5km SSE  | Heard         | 8  | Explosion | Undetermined | N/K   | 17-Oct, 17:36-17:40 |
|  | 3-5km SE   | Heard         | 6  | Explosion | Undetermined | N/K   | 17-Oct, 17:43-17:46 |
|  | 3-5km ESE  | Heard         | 3  | Explosion | Undetermined | N/K   | 17-Oct, 17:45-17:46 |
| About 500m NE of Kamianka (government-controlled, 20km N of Donetsk)             | 3-5km S  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 09:36       |
|  | 3-5km S  | Heard         | 7  | Explosion | Undetermined | N/K   | 17-Oct, 09:46       |
|  | 3-5km S  | Heard         | 2  | Explosion | Undetermined | N/K   | 17-Oct, 10:58       |
|  | 2-3km E  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 11:00       |
|  | 3-5km S  | Heard         | 2  | Explosion | Undetermined | N/K   | 17-Oct, 11:04       |
|  | 3-5km S  | Heard         | 6  | Burst     |              | HMG   | 17-Oct, 14:44       |
| W edge of Zalizne (formerly Artemove, government-controlled, 42km NE of Donetsk) | 2-3km E  | Heard         | 15 | Burst     |              | Small arms  | 17-Oct, 09:43       |
|  | 2-3km SE   | Heard and saw | 1  | Explosion | Undetermined | N/K   | 17-Oct, 10:08       |
|  | 1-2km SE   | Heard         | 4  | Burst     |              | Small arms  | 17-Oct, 10:13       |
|  | 1-2km SE   | Heard         | 4  | Shot      |              | Small arms  | 17-Oct, 10:13       |
|  | 2-3km SE   | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 10:46       |
|  | 1-2km E  | Heard         | 26 | Shot      |              | Small arms  | 17-Oct, 13:57-14:00 |
|  | 1-2km E  | Heard         | 21 | Burst     |              | Small arms  | 17-Oct, 14:06-14:08 |
|  | 1-2km E  | Heard         | 2  | Explosion | Undetermined | N/K   | 17-Oct, 14:08       |
| Verkhnotoretske (government-controlled, 23km NE of Donetsk)                      | 2-3km SE   | Heard         | 3  | Explosion | Undetermined | N/K   | 17-Oct, 10:57-11:00 |
|  | 3-4km ESE  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 10:08       |
| Holmivskiyi (non-government-controlled, 49km NE of Donetsk)                      | 4-5km E  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 11:14       |
|  | 3-4km E  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 12:05       |
|  | 3-4km E  | Heard         | 2  | Explosion | Undetermined | N/K   | 17-Oct, 12:12       |
|  | 2-3km SSE  | Heard         | 4  | Burst     |              | HMG   | 17-Oct, 08:52       |
| SW edge of Novoluhanske (government-controlled, 53km NE of Donetsk)              | 2-3km SSE  | Heard         | 2  | Explosion | Undetermined | N/K   | 17-Oct, 09:01       |
|  | 4-5km SE   | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 10:01       |
|  | 4-5km SE   | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 10:08       |
|  | 1-2km W  | Heard         | 1  | Burst     |              | HMG   | 17-Oct, 11:08       |
|  | 1-2km W  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 11:14       |
|  | 1-2km SW   | Heard         | 1  | Burst     |              | HMG   | 17-Oct, 11:58       |
|  | 1-2km SW   | Heard         | 1  | Burst     |              | HMG   | 17-Oct, 12:08       |
|  | 1-2km SW   | Heard         | 2  | Burst     |              | HMG   | 17-Oct, 12:12       |
|  | 0.8-1km W  | Heard         | 1  | Burst     |              | Small arms  | 17-Oct, 13:11       |
|  | 1-2km W  | Heard         | 2  | Burst     |              | Small arms  | 17-Oct, 13:52       |
|  | 1-2km W  | Heard         | 1  | Explosion | Undetermined | N/K   | 17-Oct, 14:22       |
|  | Zolote-4/Rodina (government-controlled, 59km W of Luhansk) |               |    |           |              | Undetermined (assessed as outside the disengagement area near Zolote) |                     |
| 5-7km S  |  | Heard         | 1  | Explosion |              | N/K   | 17-Oct, 10:20       |

|  |             |       |    |                |   |            |                     |
|--|-------------|-------|----|----------------|---|------------|---------------------|
|  | 2-4km SE    | Heard | 1  | Explosion      | Undetermined (assessed as outside the disengagement area near Zolote) | N/K        | 17-Oct, 10:24       |
|  | 3-5km S     | Heard | 1  | Explosion      | Undetermined (assessed as outside the disengagement area near Zolote) | N/K        | 17-Oct, 10:25       |
| 4km SW of Popasna (government-controlled, 69km W of Luhansk)           | 7-10km SE   | Heard | 13 | Explosion      | Outgoing  | Artillery  | 17-Oct, 10:23-10:41 |
|  | 7-10km SE   | Heard | 1  | Explosion      | Outgoing  | Artillery  | 17-Oct, 11:00-11:01 |
| S edge of Popasna (government-controlled, 69km W of Luhansk)           | 7-10km SSE  | Heard | 1  | Explosion      | Outgoing  | N/K        | 17-Oct, 11:22-11:23 |
|  | 4-6km SSE   | Heard | 11 | Explosion      | Outgoing  | Artillery  | 17-Oct, 14:40-15:30 |
|  | 3-4km SSE   | Heard | 8  | Shot and burst |   | Small arms | 17-Oct, 14:40-15:30 |
| N edge of Popasna (government-controlled, 69km W of Luhansk)           | 10-15km SSE | Heard | 2  | Explosion      | Outgoing  | Artillery  | 17-Oct, 17:06-17:07 |
| Kalynove (non-government-controlled, 60km W of Luhansk)                | 1-3km WNW   | Heard | 6  | Explosion      | Undetermined  | N/K        | 17-Oct, 10:23-10:27 |
| NE edge of Orikhove (government-controlled, 57km NW of Luhansk)        | 3-5km SW    | Heard | 9  | Explosion      | Undetermined (assessed as outside the disengagement area near Zolote) | N/K        | 17-Oct, 10:25-10:32 |
| 2.5km N of Stepove (non-government-controlled, 27km W of Luhansk)      | 5km WNW     | Heard | 5  | Explosion      | Undetermined  | N/K        | 17-Oct, 10:23-10:26 |
|  | 2-3km SSW   | Heard | 30 | Shot           | Outgoing  | Small arms | 17-Oct, 10:23-10:26 |
| 500m N of Pervomaisk (non-government-controlled, 58km W of Luhansk)    | 6-10km SW   | Heard | 1  | Explosion      | Undetermined  | N/K        | 17-Oct, 11:00       |
|  | 8-10km SW   | Heard | 3  | Explosion      | Undetermined  | N/K        | 17-Oct, 12:32-12:45 |
| 1.5km SW of Molodizhne (non-government-controlled, 63km NW of Luhansk) | 5-8km SSE   | Heard | 1  | Explosion      | Undetermined  | N/K        | 17-Oct, 11:30-11:35 |
|  | 4-6km S     | Heard | 1  | Explosion      | Undetermined  | N/K        | 17-Oct, 11:30-11:35 |
| Raivka (non-government-controlled, 16km NW of Luhansk)                 | 5-10km SW   | Heard | 4  | Explosion      | Undetermined  | N/K        | 17-Oct, 12:15-12:20 |
| NE edge of Katerynivka (government-controlled, 64km W of Luhansk)      | 5-7km S     | Heard | 4  | Explosion      | Undetermined (assessed as outside the disengagement area near Zolote) | N/K        | 17-Oct, 12:33-12:46 |
|  | 5-7km WSW   | Heard | 1  | Explosion      | Undetermined (assessed as outside the disengagement area near Zolote) | N/K        | 17-Oct, 12:32       |

|   |           |       |    |           |                      |     |                         |
|---|-----------|-------|----|-----------|----------------------|-----|-------------------------|
|   |           |       |    |           | area near<br>Zolote) |     |                         |
| 1km NE of<br>Kalynove-<br>Borshchuvate<br>(non-government-<br>controlled, 61km<br>W of Luhansk) | 4-8km SSW | Heard | 16 | Explosion | Undetermined         | N/K | 17-Oct, 15:13-<br>15:45 |