Translation

Determining the Impact of Explosive Ordnance under the Approximate Conditions of the "Kapija" City Square in Tuzla on May 25th at 20.55 hours

-Testing Ground Report-

TOC–12–1385
INTERNAL

Translation

Content

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1. GENERAL INFORMATION

1.1 THE SUBJECT OF TESTING

The subject of testing is to determine the effect of impact of explosive ordnance by static activation, under approximate conditions of the "Kapija" city square in Tuzla on May 25th, 1995 at 20.55 hours.

1.2 THE AIM OF THE TESTING

The aim of the testing is to experimentally gather data for the needs of Republika Srpska`s Centre for the research of war, war crimes and search for missing persons in order to determine the conditions which led to the tragic event on Tuzla's "Kapija" square on May 25th, 1995 at 20.55 hours.

1.3 THE REQUEST FOR TESTING AND AVAILABLE MATERIAL

The request for the testing was filed by Republic of Srpska Ministry of Justice, Centre for the research of war, war crimes and search for missing persons, through the Minister of Defence of Republic of Serbia. With the consent of the Cabinet of the Minister of Defence of the Republic of Serbia (no.918-12 dated April 04, 2014), the Cabinet of the Chief of SAF General Staff (no. 1885-14 dated April 08, 2014.), the Department for Planning and Development (J-5) of the SAF GS has served TTC (Technical Test Centre) a memo (no.1818-28 dating June 05, 2014) mandating the realisation of the testing; internally registered at the Technical Test Centre – TTC under no. 05-833-25 dating June 09, 2014.

1.4 EVALUATION OF TESTING

Based on the documents delivered, the 13th meeting of the board of directors of the TTC (Technical Test Centre) held on June 10, 2014, concluded that the requests from the Ministry of Justice, Centre for the research of war, war crimes and search for missing persons for hiring the TTC are in accordance with the activities and expertise of the TTC and that the requested demands can be completed at the "Testing Ground Nikinci". The board of directors of TTC (Technical Test Centre) appointed Lt. Col. Miloš Radovanović, engineer, as the team leader for this assignment and Lieutenant Siniša Gaćić as team member.

1.5 THE PROGRAMME AND PLAN OF THE TEST

With the memo no. 05-8 33-27 dated June 16th 2014, TTC (Technical Test Centre) was given "The programme for determining the Impact of Explosive Ordnance Under the Approximate Conditions of the "Kapija" City Square in Tuzla on May 25th at 20.55 hours" approved by the director of Centre for the research of war, war crimes and search for missing persons of Republic of Srpska. The programme was harmonized on June 20th 2014, at the TTC attended by the experts of the defence team.

1.6 TESTING

The testing was performed at the "Testing Ground Nikinci" from June 12th 2014 to September 04th 2014.

1.7 ATTENDING EXPERTS

The testing was attended by the experts for the defence team:

- Mile Poparić, engineer, ballistics expert,
- Mirjana Anđelković Lukić, PhD, engineer, explosives expert,
- Željko Karan, PhD, forensic medicine expert,
- Jugoslav Petrušić, project leader,
- Đuković Branka, defence investigator,
- Rade Lazić, defence investigator.

The testing that was performed on August 26, 2014 and September 04, 2014 was attended by a significant number of observers, reporters and television crews, which responded to the invitation of the defence team. The request for entry and attendance to the testing, for the abovementioned observers was delivered and approved by the Department for Planning and Development (J-5) of the SAF GS.

1.8 THE SPECIFICS

By order of the Serbian defence minister (64-95 from April 25, 2014) and for the needs of the experts from the defence team, two artillery mechanics from the "Testing ground Nikinci" have performed measurements of the gunpowder chamber on seven 130 mm M46 cannons from April 27th to April 29th 2014, at the "Kozara" army barrack in Banja Luka. The weapon`s numbers are as follows: 7621, IT6074, RG4030B, T6071, NRG4042B, 9234 and N8556.
The records from gunpowder chambers measurement have been delivered to the defence team with the memo no. 05-833-17 dated May 12, 2014. For testing purposes the representatives of the defence team have organised and constructed temporary objects, a scene with eight objects identical to the real objects on the "Kapija" city square in Tuzla, on the grounds of "Pancir" placement of the "Testing Ground Nikinci". (Figures 1 and 2). The city square dimensions and objects placement are represented in APPENDIX 1.

Figure 1 - Central part of "Kapija" city square. *Store"NIK" in the background, shop "Kapija" and "BiH Lottery" (left) "Samoizbor" (right*)

Figure 2 - Store "Seljanka" coffee shop"Gulam", and coffee shop Kapija"(in the background)

Entry of subcontractors dealing with the development of the scene was requested, and they were granted access to the "Testing Ground Nikinci".

1.9. MATERIAL SECURITY

Material security was part of the the juristiction of the defence team. The "Testing ground Nikinci" enabled the engineering of the space, admission and temporary holding of ordnance to be tested. For testing purposes the following resources were engaged and spent, provided by the Ministry of Defence and the Serbian Armed Forces respectively:

Land Digger SKIP BN-80 .....36 m/h
ULT 160 ..... 6 m/h
130 mm TØ M79 Shell..... 8 pc.
130 mm TØ OF482 Shell ..... .8 pc.
155 mm TØ M107 Shell .....5 pc.
Electric blasting cap no.8 .....35 pc.
Blasting cap no.8 .....10 pc.
Trinitrotoluen 200g .....10 kg
PEP-500 .....13 kg
Slow burning fuse .....,,6 m

All of the recorded engaged and deployed assets were payed by the defence team according to existing price lists.

2 TESTING

2.1 GENERAL INFORMATION

2.1.1 Present Individuals

The testing was attended by the following individuals on days of implementation:

- Poparić Mile,
  31.07, 01.08, 05.08, 11.08, 15.08, 25.08, 26.08, 29.08 и 04.09.2014.
- Mirjana Anđelković Lukić, PhD,
  31.07, 01.08, 05.08, 11.08, 15.08, 25.08, 26.08, 29.08 и 04.09.2014.
- Petrušić Jugoslav,
  31.07, 01.08, 05.08, 11.08, 15.08, 25.08, 26.08, 29.08 и 04.09.2014.
- Djuković Branka,
  31.07, 01.08, 05.08, 11.08, 15.08, 25.08, 26.08, 29.08 и 04.09.2014.
- professor Željko Karan, PhD,
  31.07, 01.08, 05.08, и 04.09.2014.
- Branković Ilija,
  31.07, 01.08, 05.08, 15.08, 25.08, 26.08, 29.08 и 04.09.2014.
- Lazić Rade,
  31.07, 01.08, 29.08 и 04.09.2014.
- Ivošević Milorad,
  05.08, 11.08, 25.08 и 04.09.2014.

- Tomić Duško,
  05.08, 11.08, 25.08 и 04.09.2014.
- Konstantinović Milorad,
  05.08, 11.08, 25.08 и 04.09.2014.
- Kostić Vlada,
  29.08 и 04.09.2014.
- Luković Branka,
  29.08 и 04.09.2014.

2.1.2 Recordings

The preparation of analysis, activation, explosion, state of human figures models, the surface at the place of activation, and "Golf 1" vehicle after the explosion were recorded by video cameras, cameras, as well as highspeed camera with the possiblity of recording 1500 pictures per second.

2.1.3 Execution place

All of the tests have been completed at the "Testing Nikinci" on the grounds of "Pancir" placement.

2.1.4 Activation

Projectile and explosives activation were initiated by:

- Slow burning fuse (Blasting cap and Slowburning fuse), for testing done on July 31st and August 01st 2014,
- Electrical initiation (Electric blasting cap EDK-8), for testing done on August 05th, 11th, 15th, 25th, 26th, 29th and September 4th 2014.

2.2 THE EFFECT OF 130 mm M79 PROJECTILE ON HUMAN FIGURE MODELS UNDER DIFFERENT ANGLES OF DESCENT

2.2.1 Activation of 130 mm M79 projectile placed at the angle of 61° to the horizon.

Testing Aim:

The testing aim is to determine the approximate depiction of the pieces of the 130 mm M79 projectiles activated under the conditions that match approximately the projectile range from the "Panjik" firing position on the "Kapija" city square in Tuzla.

Execution date:

The testing was realized on July 31st, 2014.

Human testing models layout:

The human figure models were placed on characteristic points, and their layout is shown on figures 3 and 4. (The appearance and dimensions of the human figure models are given in APPENDIX 2).

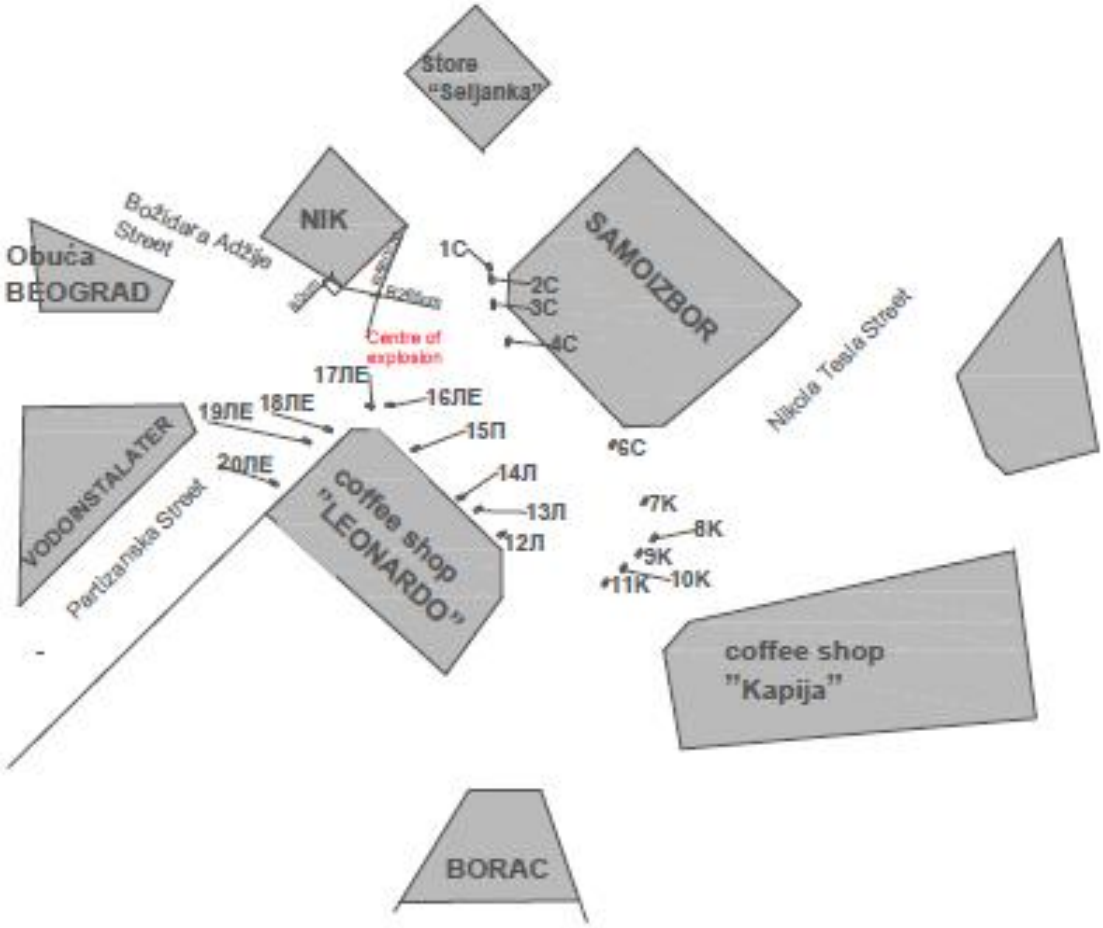

Figure 3 – The layout of human figure models during the check of projectile pieces spread upon activation of TF 130 mm M79 projectile
Marked objects are fictional objects that match the position of objects on the "Kapija" city square in Tuzla.

Angle under which the projectile was activated:

The projectile was activated at the angle of 61° to the horizon.

Projectile orientation:
Direction of longitudinal axis of projectile relative to the objects on the "Kapija" city square is shown on figure 5 and corresponds to the real asimuth of 270°.

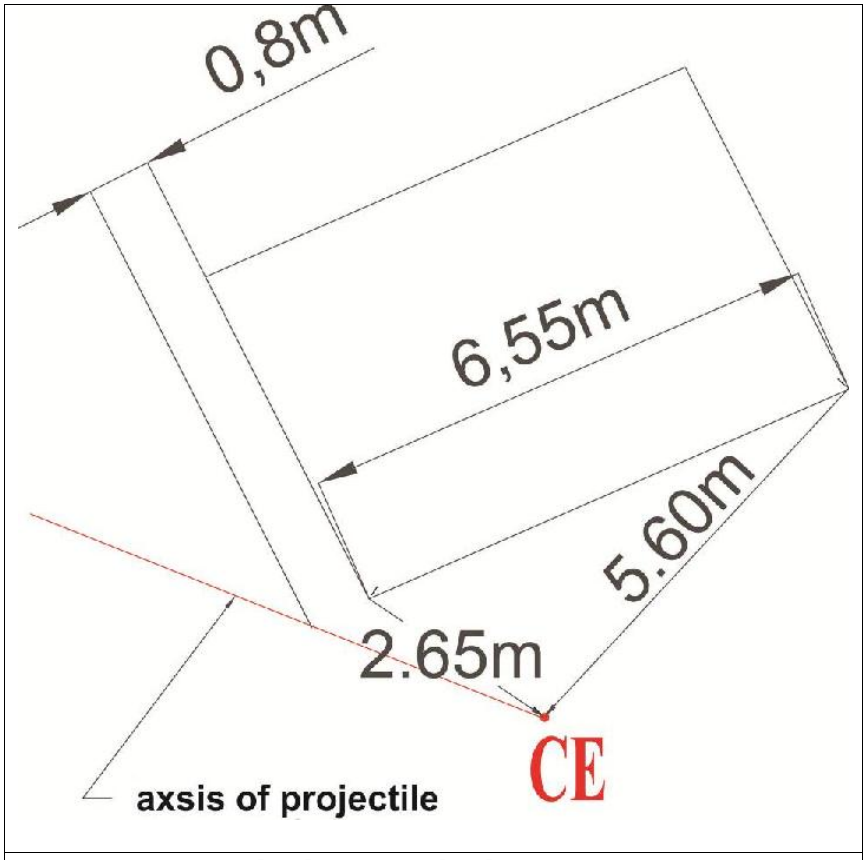

Figure 5 – Projectile placing on the direction
– `CE` Centre of explosion

Projectile data:
- Type of projectile: High explosive 130 mm Tϕ M79,
- Projectile series: TV 8805,
- Shell series: TV8780,
- Shell number: 962,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Mass charachter: ++,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation)

Registered hits on human figure models:
Review of registered hits on human testing models after the explosion is shown in APPENDIX 3.

General Observations:
- On the photographs of human testing models the traces of pieces of activated projectile series TV 8805 are marked with red color,
- The human testing models did not contain any traces of soot as a result of the detonation,
- Under the term hit, we considered all the hits into the human testing models (both punctures as well as projectiles trapped in the models).

Figure 4 – The layout of the activation scene for the 130 mm M79 projectile, placed at the angle of 61° to the horizon, before, during and after the explosion.

Recorded material:

- Video materials (Video 00004 dating July 31, 2014, TF 130 mm angle 61 and Video 00007 dated July 31, 2014, TF 130mm angle 61), - Photographs (PICT0241 until PICT0334 and DSCN5483 until DSCN5544)
- *The photographs and the video materials can be found in the folder titled "Examination point 2.2.1"on the accompannying DVD no.1 which is an integral part of the Report.*

2.2.2 The activation of 130 mm M79 projectile placed under the angle od 30° to the horizon.

Testing Aim:

The testing aim is to determine the approximate depiction of pieces allocation of the 130 mm M79 projectiles activated under the conditions that match approximately the projectile range from the "Panjik" firing position on the "Kapija" city square in Tuzla.

Execution date:

The testing was realized on July 31, 2014.

Human figure models layout:

The human testing models were placed on characteristic points, and their layout is shown on figure 6.

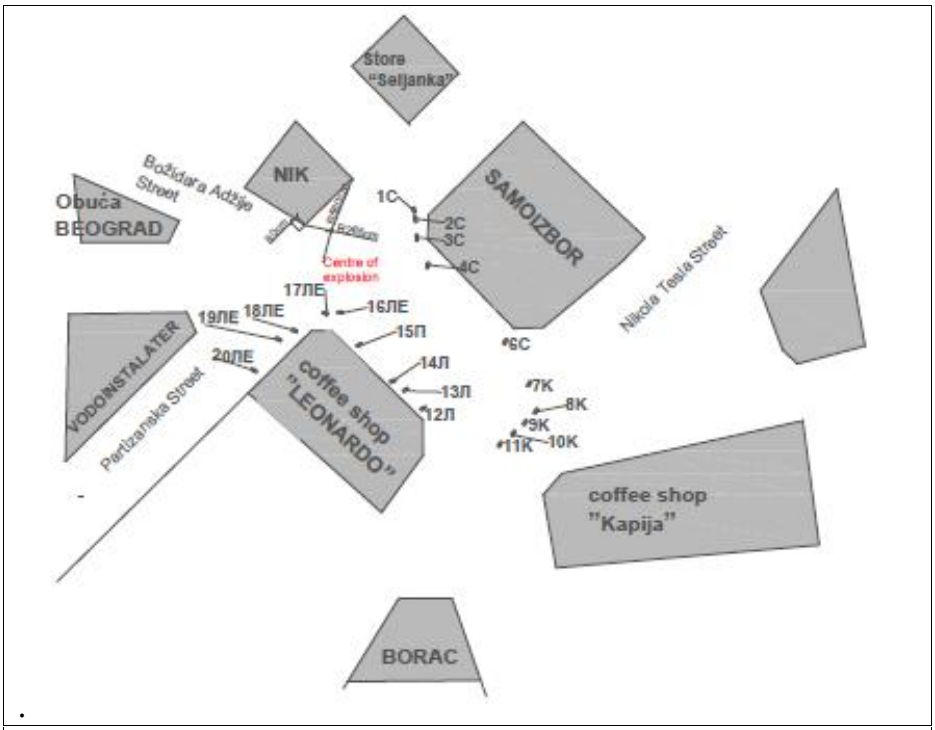

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Figure 6 - The human testing models arrangement during the check of projectile pieces spread during the activation of 130 mm M79 projectile placed at the angle of 30° to the horizon.
The marked objects are ficticious objects that match the position of objects on the "Kapija" city square in Tuzla.

Angle under which the projectile was activated:

The projectile was activated at the angle of 30° to the horizon.

Projectile course:
Direction of longitudinal axis of projectile relative to the objects on the "Kapija" city square is shown on figure 7 and corresponds to the real asimuth of 270°.

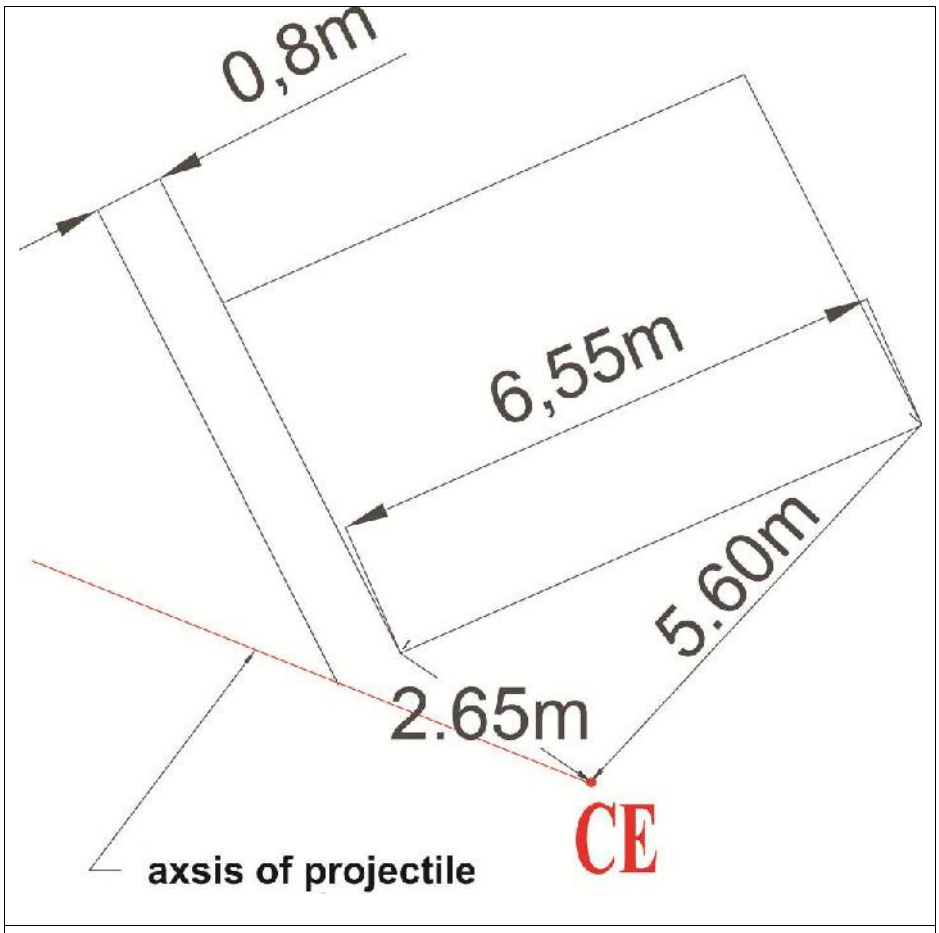

Figure 7 –Projectile placing on the direction
– `CE` Centre of explosion

Projectile data:

- Type of projectile: High explosive 130 mm Tϕ M79,
- Projectile series: TV 8805,
- Shell series: TV8780,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Mass charachter: ++
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation)

Registered hits on human testing models:

Review of registered hits on human figure models after the explosion is shown in APPENDIX 4.

General Observations:

- On the photographs of human figure models the traces of pieces of activated projectile series TV 8805 are marked with red color,
- The human figure models did not contain any traces of soot as a result of the detonation,
- Under the term hit, we considered all of the hits into the human figure models (both punctures as well as projectiles trapped in the models).

Recorded material:

- Video materials (Video 00008 dating July 31, 2014, TF 130 mm angle 30),
- Photographs (PICT0360 until PICT0366)
- *The photographs and the video materials can be found in the folder titled "Examination point 2.2.2"on the accompannying DVD no.1 which is an integral part of the Report.*

2.2.3 The activation of 130mm M79 projectile placed at the angle of 90° to the horizon.

Testing aim:

The testing aim is to determine an approximate picture for the layout of projectile pieces of the 130 mm M79, activated under the angle of 90° to the horizon, in the case when the positions of human figure models are approximately corresponding to the position of humans in the characteristic points on the "Kapija" square in Tuzla at the time of the incident and when the projectile was activated at the point which corresponds to the point of explosion at the "Kapija" square in Tuzla.

Execution date:

The testing was realized on August 01, 2014.

Human testing models layout:

The human figure models were placed on characteristic points, and their layout is shown on figure 8 and 9.

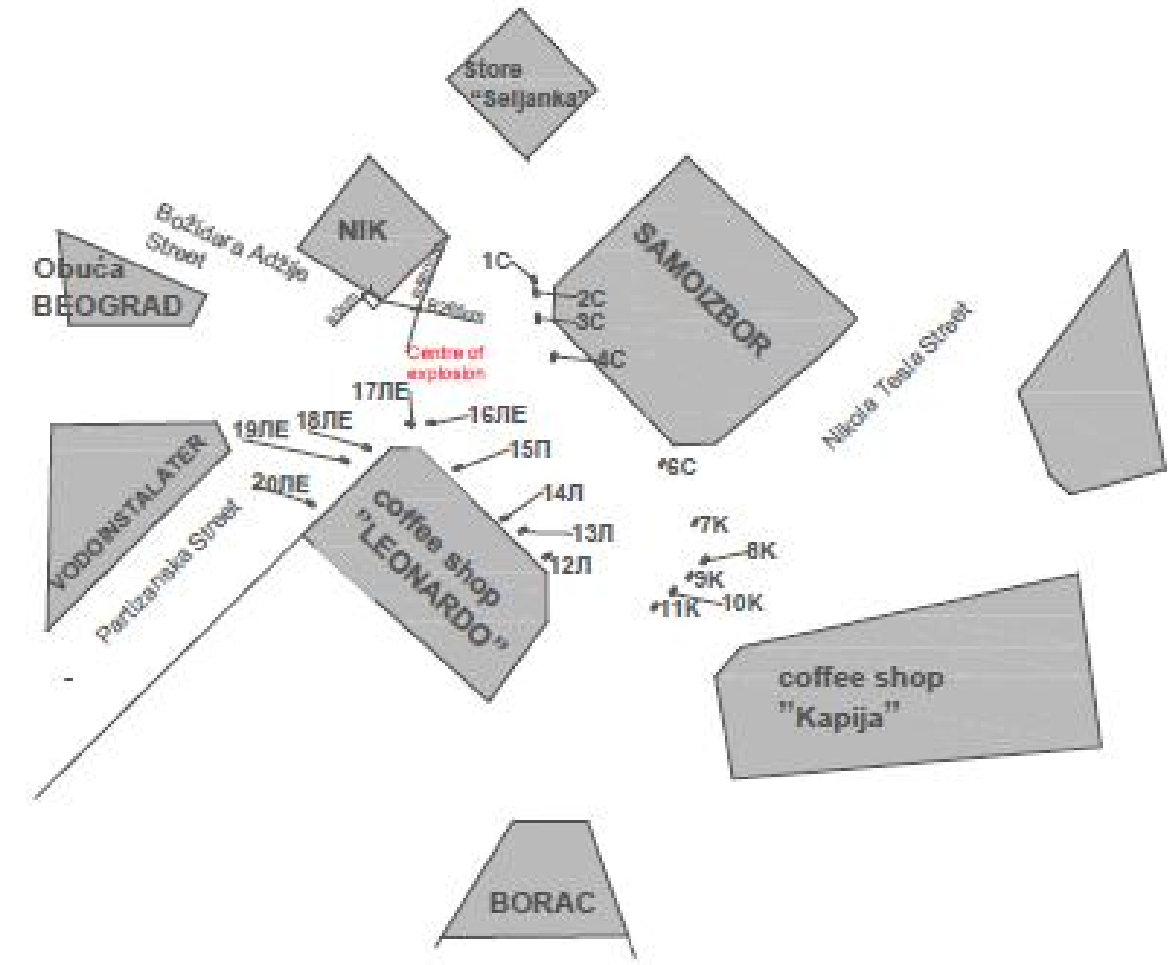

Figure 8 - The human figure models arrangement during the check of projectile pieces spread during the activation of 130 mm M79 projectile placed at the angle od 90° to the horizon.
The marked objects are ficticious objects that match the position of objects on the "Kapija" city square in Tuzla.

Figure 9 - The layout of human figure models, during the check of projectile spread for the 130 mm M79 projectile, at the angle of 90° to the horizon, before and during the explosion.

Position of the projectile: The position of projectile is shown on figure 10.

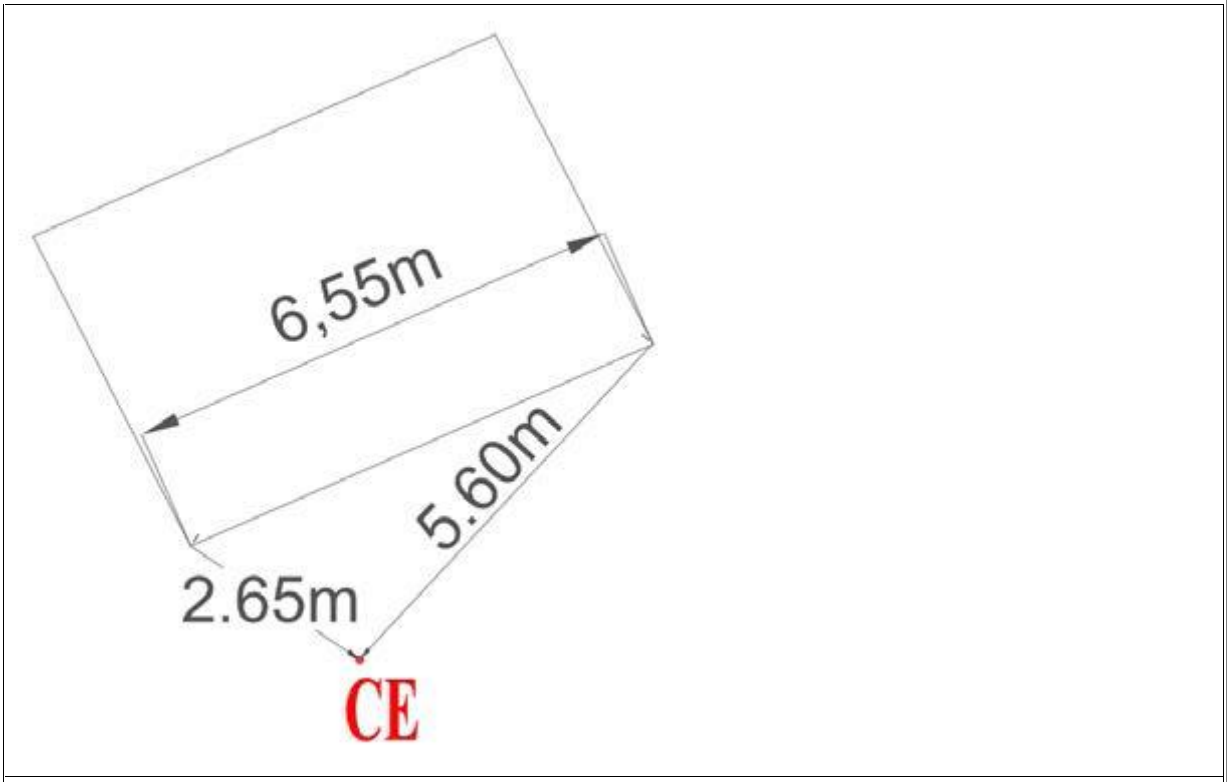

Figure 10 – The surface on which the 130 mm M79 projectile was activated at the angle od 90° to the horizon
– *`CE` Centre of explosion*

Angle under which the projectile was activated:

The projectile was activated at the 90° angle to the horizon.

Surface:
The projectile was activated on granite cube surface arranged without cramming, while joints were sealed with sand, figure 11.

Figure 11 – The surface on which the 130 mm M79 projectile was activated at the 90° angle to the horizon

Projectile data:

- Type of projectile: High explosive 130 mm Tϕ M79,
- Projectile series: TV 8805,
- Shell series: TV8333,
- Shell number: 208,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Mass charachter: ++,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation)

Registered hits on human testing models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 5.

General Observations:

- On the photographs of human figure models the traces of pieces of activated projectile series TV 8805 are marked with red color,
- We did not observe any kind of soot residue as a result of detonation. Soot residue from the detonation has been observed only on the stick that was placed in the previous experiment, at 80 cm from the corner of the ficticious object (the "NIK" building) for the purpose of determining direction, figure 7,
- Under the term hit, we considered all of the hits into the human figure models (both punctures as well as projectiles trapped in the models).
- After the explosion, disturbance of the surface happened, and the position of the cubes in relation to the place of the explosion is shown on figure 12.

Figure 12 – The explosion place of the 130 mm M79 projectile, placed under the angle of 90°. *(Photograph number PICT0486)*

Recorded material:

- Video materials (M2U01337, proba 130 mm 01.08.2014),
- Photographs (PICT0374 to PICT0380 and PICT0484, PICT0485, PICT0487, PICT0488 and PICT0387 until PICT0482)
- *The photographs and the video materials can be found in the folder titled "Examination point 2.2.3"on the accompannying DVD no.1 which is an integral part of the Report.*

2.2.4 The activation of 130 mm M79 projectile placed at the 43° angle to the horizon.

Testing Aim:

Translation

The testing aim is to determine the depiction of pieces allocation of the 130 mm M79 projectiles activated under the conditions that match a the projectile range on the "Kapija" city square in Tuzla.

Execution date:

The testing was realised on August 01, 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figure 13.

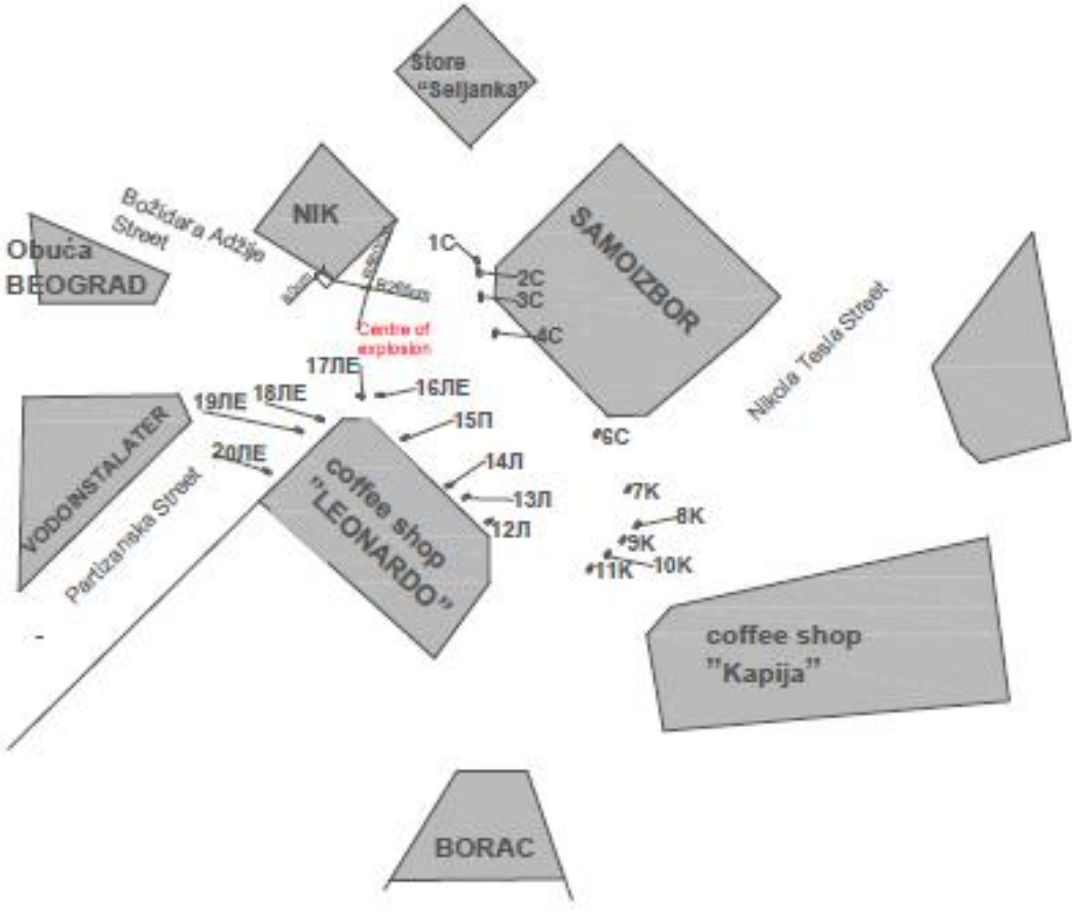

Figure 13 - The human testing models arrangement during the check of projectile pieces spread during the activation of 130 mm M79 HE projectile placed at the 43° angle to the horizon.
The marked objects are ficticious objects that match the position of objects on the "Kapija" city square in Tuzla.

Angle under which the projectile was activated:

The projectile was activated under 43° angle with regard to the horizon, figure 14.

Figure 14 – Projectile 130 mm M79, placed at the 90° angle to the horizon

Projectile course:
Direction of longitudinal axis of projectile relative to the objects on the "Kapija" city square is shown on figure 15 and corresponds to the real asimuth of 270°.

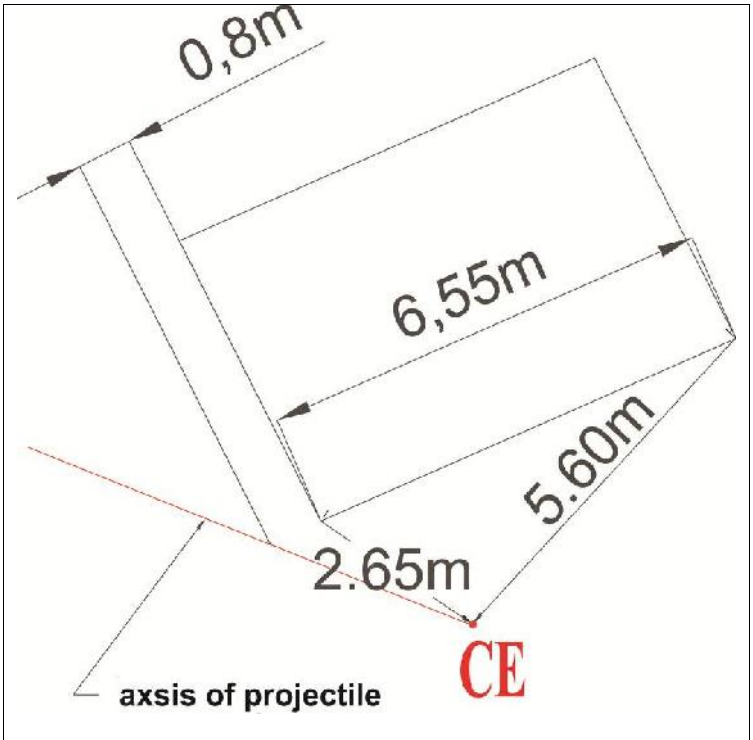

Figure 15 –Projectile placing on the direction – `CE` Centre of explosion

Projectile data:

- Type of projectile: High explosive 130 mm Tϕ M79,
- Projectile series: TV 8805,
- Shell series: TV8820,
- Shell number: 255,
- Mass charachter: ++,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation)

Registered hits on human figure models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 6.

General Observations:

- On the photographs of human figure models the traces of pieces of activated projectile series TV 8805 are marked with red color,
- Under the term hit, we considered all of the hits into the human figure models (both punctures as well as projectiles trapped in the models).

Recorded material:

- Video materials (Video 1. avgust 2014. TF130 mm, 43stepena),
- Photographs (PICT0567 and PICT0581 until PICT0601)
- *The photographs and the video materials can be found in the folder titled "Examination point 2.2.4"on the accompannying DVD no.1 which is an integral part of the Report.*

2.3 THE EFFECT OF 130 mm OF-482N PROJECTILE ON HUMAN TESTING MODELS AND THE "GOLF 1" VEHICLE UNDER DIFFERENT ANGLES OF DESCENT

2.3.1 The activation of 130 mm OF-482M projectile placed at the 62° angle to the horizon and by the "Golf 1" vehicle.

Testing Aim:

The testing aim is to determine the approximate depiction of the pieces allocation of the 130 mm OF 482-M projectiles activated under the conditions that match approximately to the real asimuth of 270° and under the 62° descent angle on the "Kapija" city square in Tuzla

Execution date:

The testing was realized on August 05th 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figures 16 and 17.

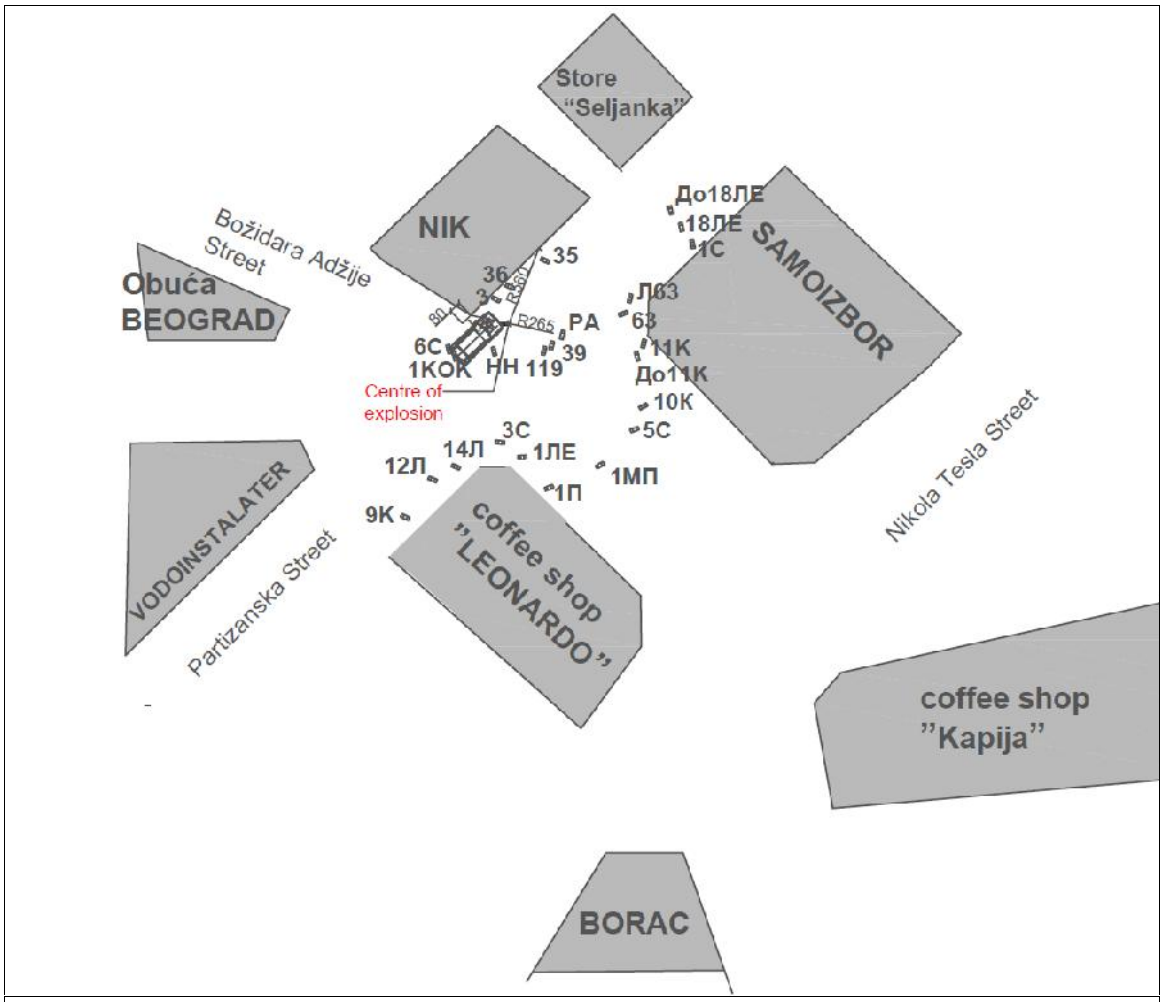

Figure 16: The human figure models arrangement before activating projectile placed under 62° angle

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Figure 17 – The models and the car, before, during and after the explosion of 130 mm Oϕ 482M projectile at the angle of 62° angle

The position of the vehicle:

The position of the vehicle, type “Golf 1“ in relation to the “NIK“ store object and the projectile is shown on figure 18.

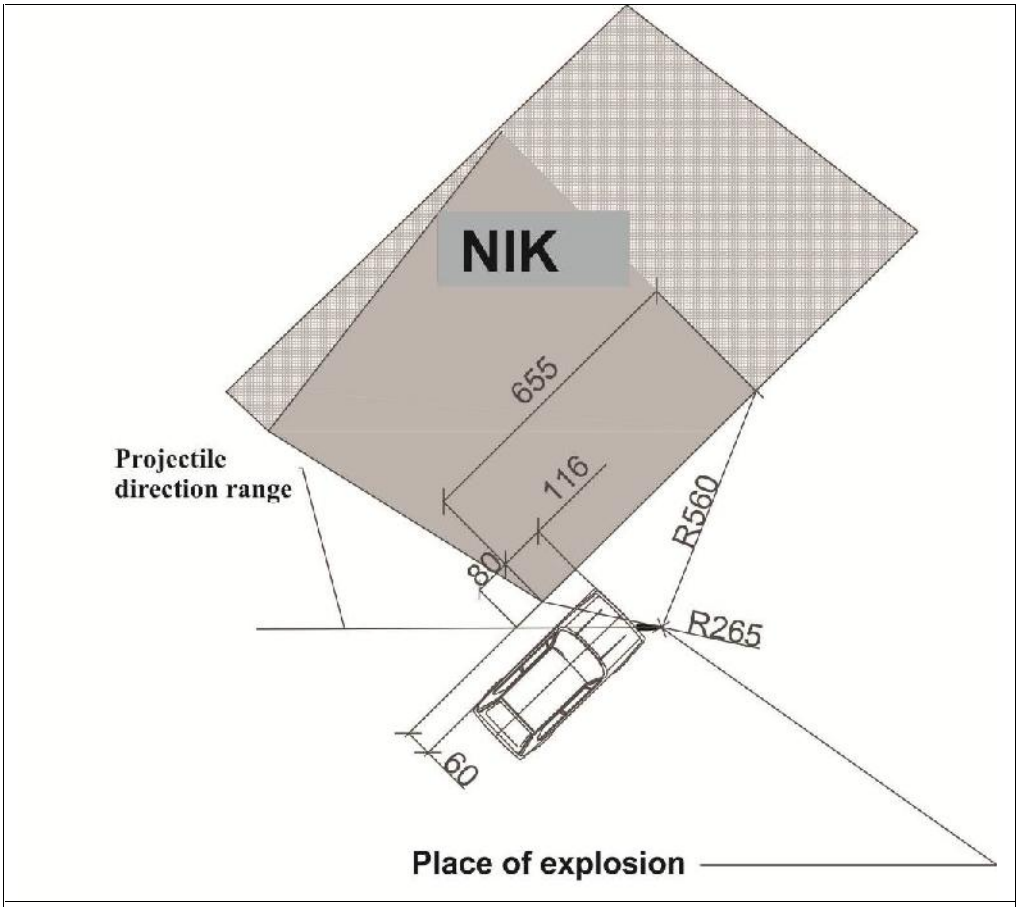


Figure 18 – The position of “Golf 1“ vehicle and the projectile before activation.

Surface:
The vehicle and the projectile are placed on concrete surface next to a concrete wall approximately 8 m in height, figure 17.

Angle of the projectile when activated:

The projectile was activated at the 62° angle to the horizon.

Projectile orientation:
Direction of longitudinal axis of projectile relative to the objects on the “Kapija“ city square corresponds to the real asimuth of 270°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 33-81,
- Shell series: 110-18-75,

- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation),
- Mass charachter: ++.

The impression from the projectile pieces on concrete surface is shown on figure 19.

Figure 19 - The impression from the projectile pieces on concrete surface after the activation of 130 mm OF 482 M projectile placed at the 62° angle to the horizon (photograph PICT0748)

The position of the vehicle after the explosion:

The vehicle, type “Golf 1“ after the explosion was pushed back 145 cm and 60 cm to the side in relation to the starting position, figure 20.

Figure 20 – The vehicle, type "Golf 1" after the activation of 130 mm OF482M projectile placed under the 62° angle in relation to the horizon (photograph PICT0754)

Registered hits on human figure models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 7.

Recorded material:

- Video materials (UB kamera 05.avgust 2014, TF 130mm, ugao 62 Golf, Video 05.avgust 2014, 130 mm ugao 62-Golf),
- Photographs (Maketa sa haube 05.082014.62-1, PICT0747 until PICT0845, raspored maketa 62 05.082014-1 и raspored maketa 62 posle eksplozije 05.082014)
  The photographs and the video materials can be found in the folder titled "Examination point 2.3.1"on the accompannying DVD no.1 which is an integral part of the Report.

2.3.2 The activation of 130 mm M79 projectile placed at the 62°angle to the horizon and by the "Golf 1" vehicle

Testing Aim:

The testing aim is to determine the approximate depiction of the pieces allocation of the 130 mm M79 projectiles activated under the conditions that match approximately to the real asimuth of 270° and under the 62° descent angle on the "Kapija" city square in Tuzla.

Execution date:

The testing was realized on 11th August 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figures 21 and 22.

Figure 21 – The models and the car, before, during and after the explosion of 130 mm M79 projectile at the 62° angle

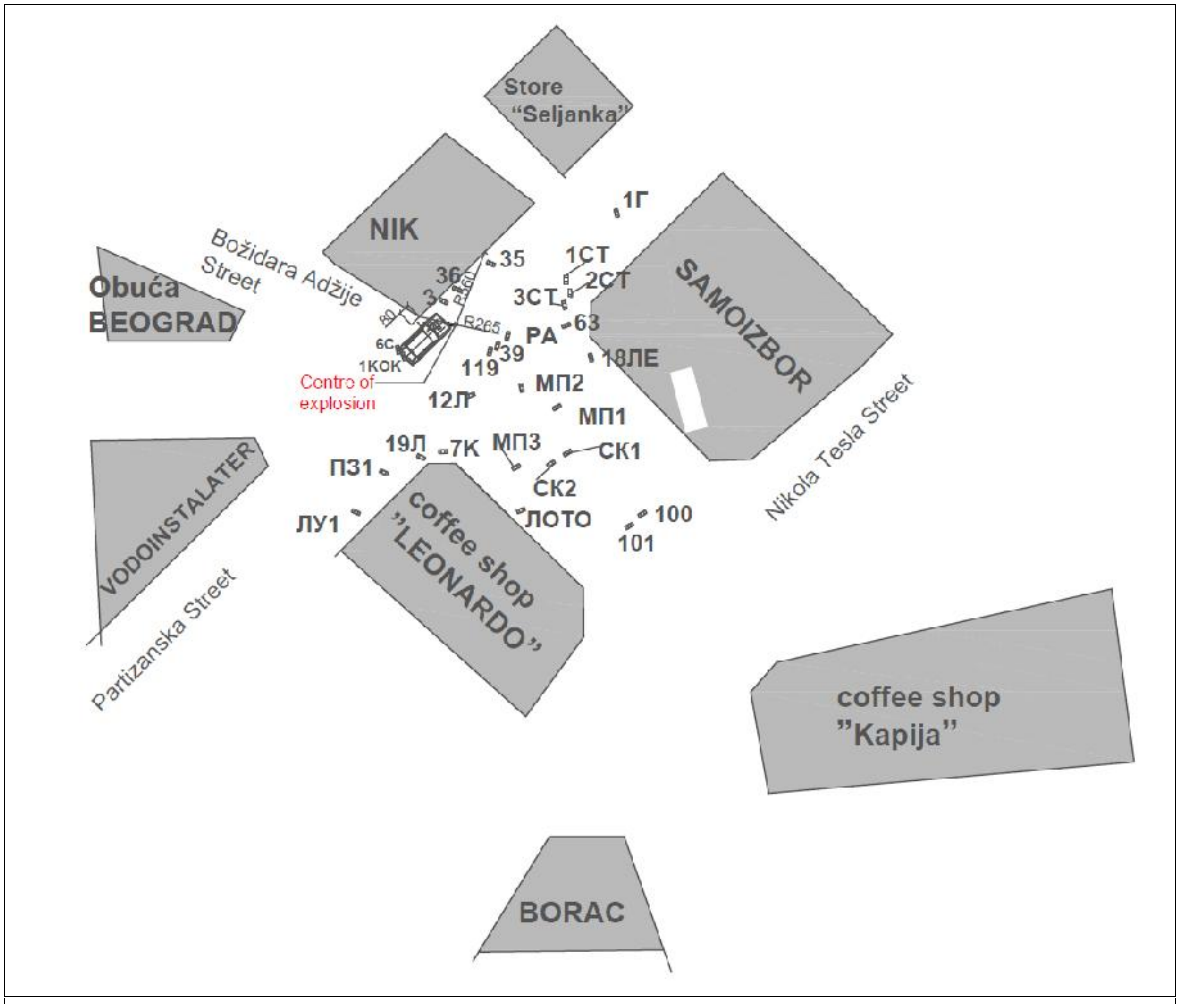
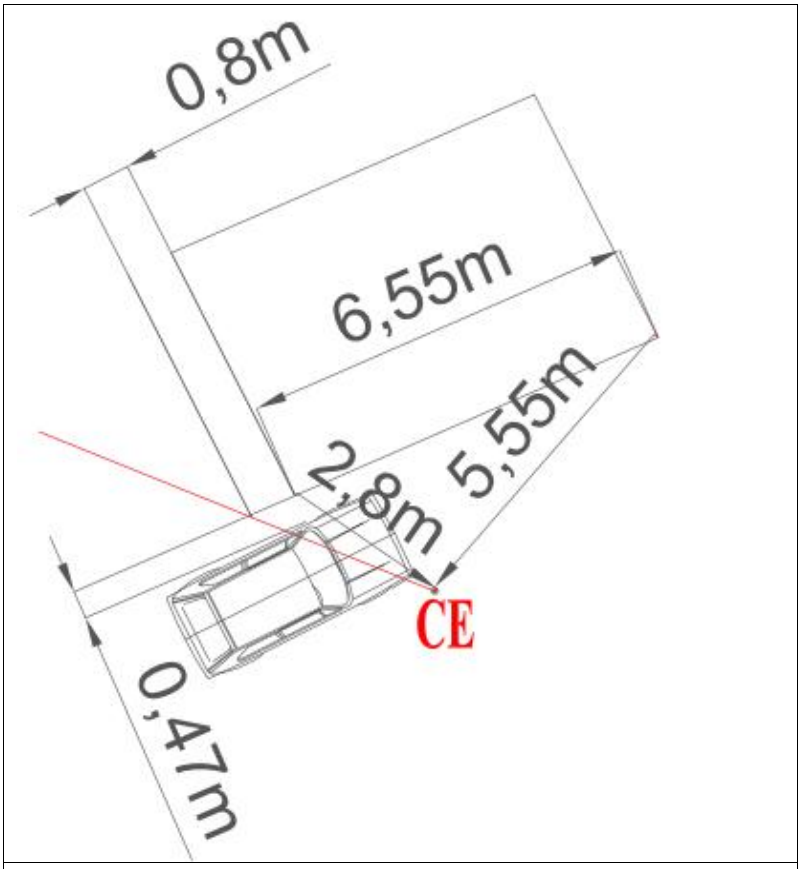


Figure 22 The human figure models arrangement before activating projectile placed under 62° angle

The position of the vehicle:

The vehicle, type "Golf 1" was placed in relation to the "NIK" store object and the projectile according to the Testing Programme (Appendix 3 of the Programme), at the point obtained by radius section 2,65m and 5,60m. At that point the projectile could have been placed under the minimal angle of 69°, which is why the expert team decided, to place the projectile in the same direction in which it is possible to attain the projectile angle of 62°, figure 23.



Photograph 23 – The position of vehicle and the projectile before projectile activation

Surface:
The vehicle and the projectile are placed on concrete surface next to a concrete wall approximately 8 m in height, figure 23.

Angle of the projectile when activated:

The projectile was activated at 62° angle to the horizon.

Projectile orientation:
Direction of longitudinal axis of projectile relative to the objects on the "Kapija" city square corresponds to the real asimuth of 270°.

Projectile data:
- Type of projectile: High explosive 130 mm Tϕ M79,
- Projectile series: TB8805,
- Shell series: TB 8334,
- Shell number: 752,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),
- Mass charachter: - -

The position of the vehicle after the explosion:

The vehicle, type "Golf 1" after the explosion was pushed backed 80 cm and 47 cm to the side in relation to the starting position, figure 24.

Figure 24 – The vehicle, type "Golf 1" after the activation of 130 mm M79 projectile placed at the 62° angle to the horizon (photograph DSCN5605)

Registered hits on human testing models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 8.

Recorded material:

- Video materials (GOPR5269, UB 1 od 11.avgusta 2014.god.),
- Photographs (PICT1026 until PICT1075, PICT1114 until PICT1118, DSCN5620, DSCN5621, DSCN5623, DSCN5625, DSCN5631, DSCN5645, DSCN9726, DSCN9727, DSCN9730 until DSCN9732, DSCN9737 until DSCN9739, DSCN9742, DSCN9746 until DSCN9748 DSCN9750, DSCN9751 and DSCN9757)
  The photographs and the video materials can be found in the folder titled "Examination point 2.3.2"on the accompannying DVD no.1 which is an integral part of the Report.

2.3.3 The activation of 130mm OF-482M projectile placed at the angle of 43° in to the horizon and by the "Golf 1" vehicle.

Testing Aim:

The testing aim is to determine the approximate depiction of pieces allocation of the 130 mm OF-482M projectiles activated under the conditions that match approximately corresponds to the real asimuth of 270° and under the 43° descent angle on the "Kapija" city square in Tuzla.

Execution date: The testing was realized 5th August 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figures 25 and 26.

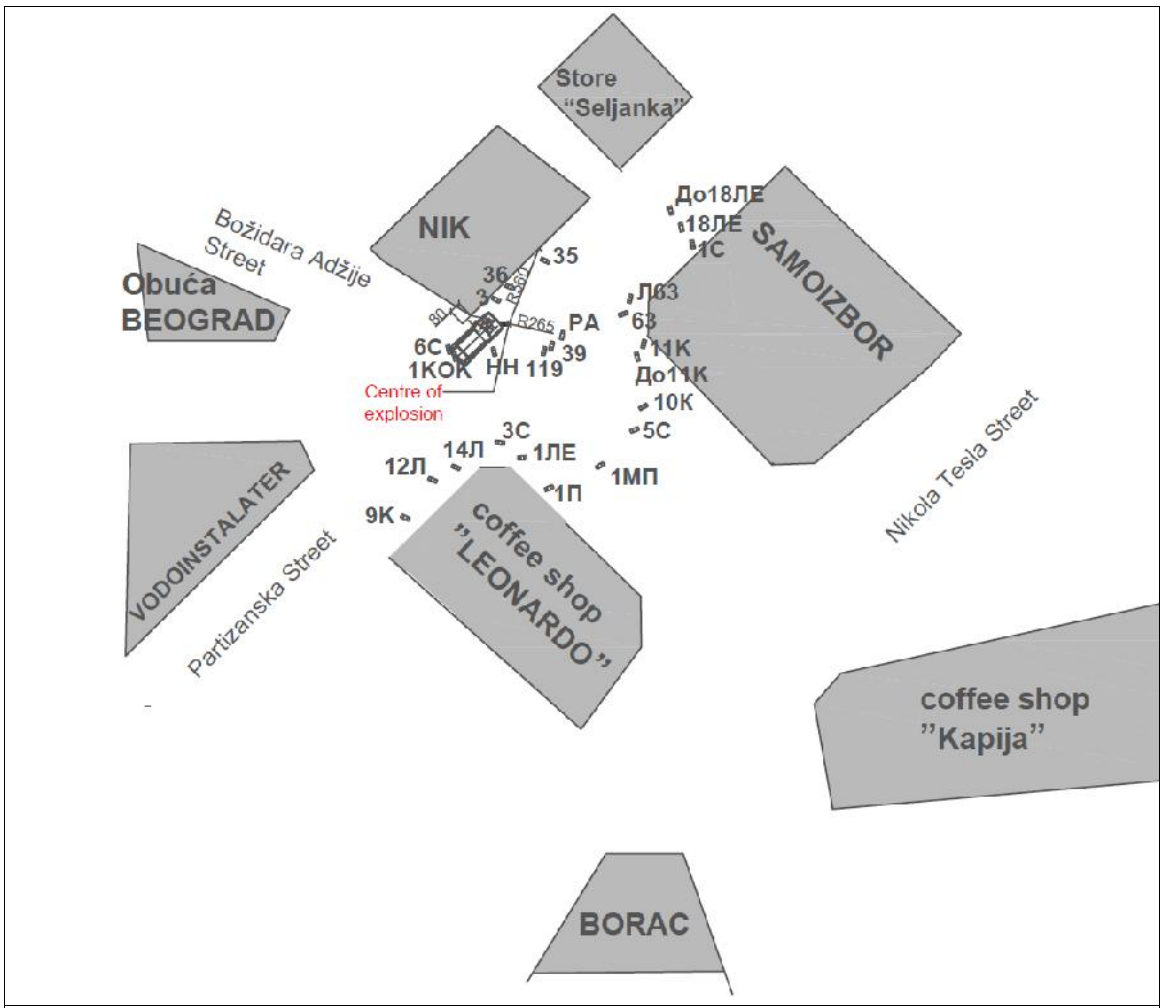


Figure 25 The human figure models arrangement before activating projectile OF 482-M placed under 43° angle

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Translation

Figure 26 – The models and the car, before, during and after the explosion of 130 mm OF 482M projectile under the 43° descent angle

The position of the vehicle:

The position of the vehicle, type “Golf 1“ in relation to the “NIK“ store object and the projectile is shown on figure 27.

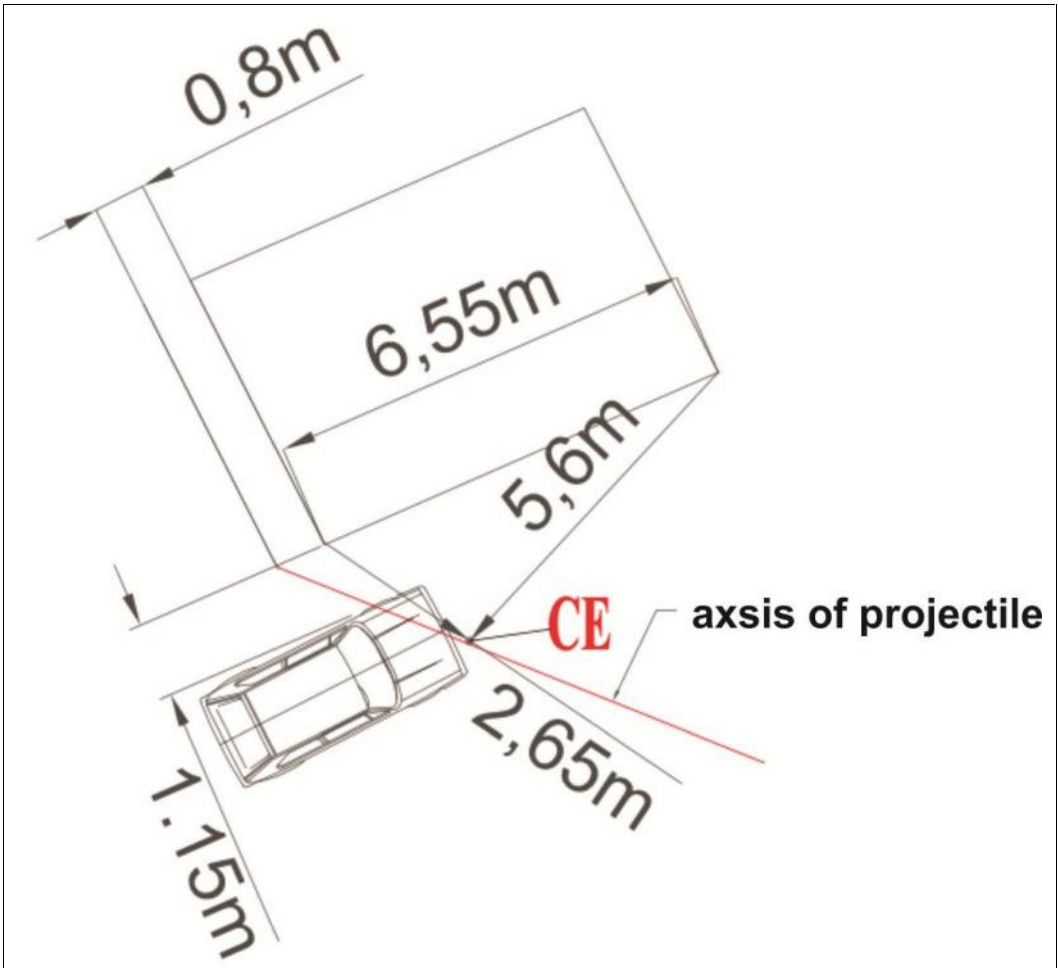

Figure 27 – The position of the vehicle and the projectile before detonation

Surface:
The vehicle and the projectile are placed on concrete surface next to a concrete wall approximately 8 m in height, figure17.

Angle at which the projectile was activated:

The projectile was activated at 43° angle to the horizon.

Projectile orientation:
Direction of longitudinal axis of projectile relative to the objects on the “Kapija“ city square corresponds to the real asimuth of 90°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 33-81,
- Shell series: 110-18-75,
- Guiding ring: copper,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),

– Mass charachter: - -

The position of the vehicle after the explosion:

The vehicle, type "Golf 1" after the explosion was pushed back 80 cm and 47 cm to the side in relation to the starting position, figure 24.

Figure 28 – The vehicle, type "Golf 1" after the activation of 130 mm OF 482-M projectile placed under the 43° angle in relation to the horizon *(photograph PICT0910)*

Recorded material:

– Video materials (UB kamera05. avgust. 2014. god. 130mm, ugao 43, Video 05. avgust. 2014. god. 130mm, ugao 43 Golf),
– Photographs (2.avi_000005640, 2.avi_000008440, PICT0892, PICT0906, PICT0910 until PICT0915)
The photographs and the video materials can be found in the folder titled "Examination point 2.3.3"on the accompannying DVD no.2 which is an integral part of the Report.

2.3.4 The activation of 130mm OF-482M projectile placed at the angle of 31° to the horizon and by the "Golf 1" vehicle.

Testing Aim:

Translation

The testing aim is to determine the approximate depiction of pieces allocation of the 130 mm OF-482M projectiles activated under the conditions that match approximately to the real asimuth of 270° and under the 31° descent angle on the "Kapija" city square in Tuzla, (Appendix 3 of the Programme).

Execution date: The testing was realized August 11th 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figures 27a and 28a.

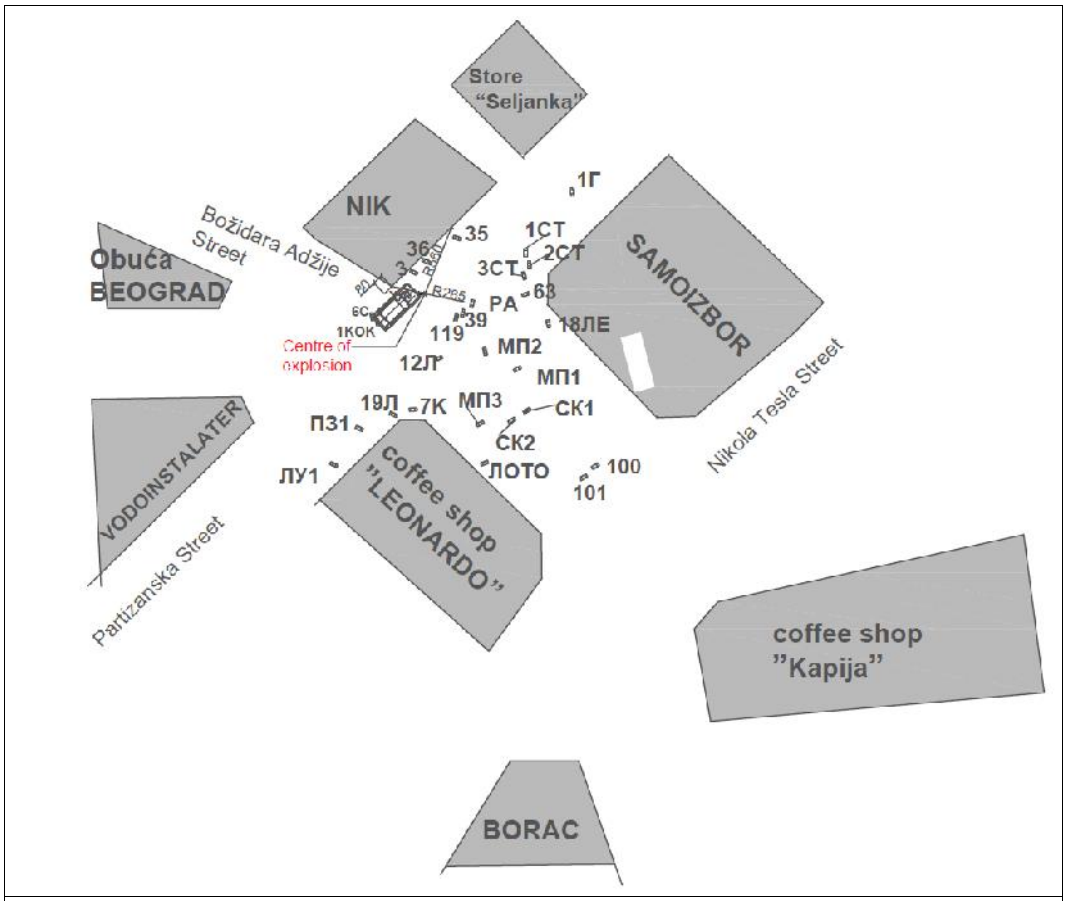

Figure 27a The human figure models arrangement before activating projectile 130mm OF 482-M placed at 31° angle

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INTERNAL

Translation

Figure 28a – The models and the car, before, during and after the explosion of 130 mm OF 482-M projectile at the 31° angle

The position of the vehicle:

The position of the vehicle, type “Golf 1“ in relation to the “NIK“ store object and the projectile is shown on figure 29.

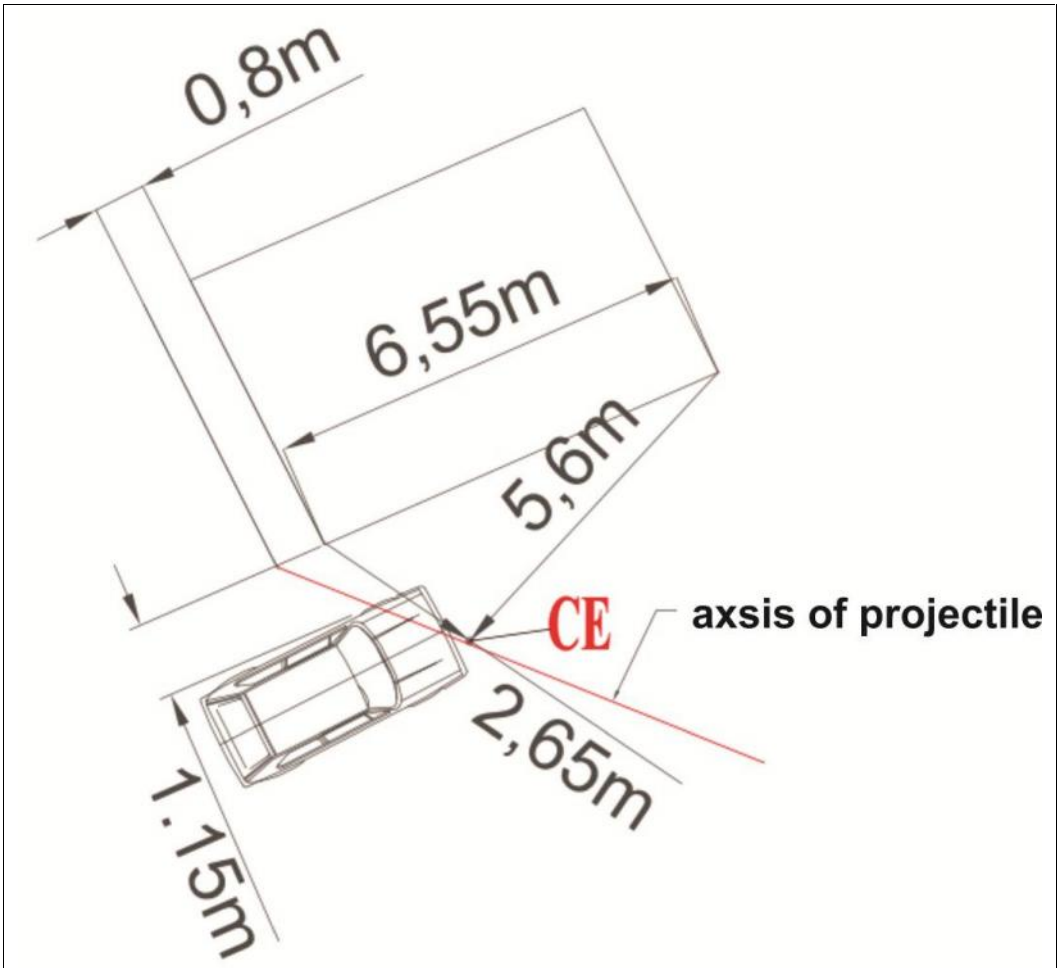

Figure 27 – The position of vehicle and the projectile before detonation

Surface:
The vehicle and the projectile are placed on concrete surface next to a concrete wall approximately 8 m in height, figure 27.

Angle at which the projectile was activated:

The projectile was activated at 31° angle to the horizon.

Projectile orientation:

Direction of longitudinal axis of projectile relative to the objects on the “Kapija“ city square corresponds to the real asimuth of 270°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 30-81,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),
- Mass charachter: - -

The position of the vehicle after the explosion:

The vehicle, type "Golf 1" after the explosion was pushed back 20 cm and 10 cm to the side in relation to the starting position, Figure 30.

Figure 30 – The vehicle, type "Golf 1" after the activation of 130 mm OF 482-M projectile placed at the 31° angle to the horizon *(photograph* PICT0754*)*

Registered hits on human figure models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 9.

Recorded material:

- Video materials (GOPR5270, GOPR5271 and UB 2 od 11.avgusta 2014.god.),
- Photographs (DSCN5658 until DSCN5660, DSCN5669, DSCN5672, DSCN5676, DSCN9804 until DSCN9808, DSCN9815 until DSCN9835)
  The photographs and the video materials can be found in the folder titled "Examination point 2.3.4"on the accompannying DVD no.2 which is an integral part of the Report.

2.4 THE IMPACT OF 130mm PROJECTILE ON HUMAN TESTING MODELS, THE "GOLF 1" VEEHICLE, THE OBJECTS OF THE SCENE UNDER DIFFERENT ANGLES OF DESCENT

2.4.1 The activation of 130mm OF-482-M placed at the 62° angle to the horizon and by the vehicle "Golf 1" on the scene of "Kapija " city square.

Testing Aim:

The testing aim is to determine the approximate depiction of the pieces allocation of the 130 mm OF-482M projectiles activated under the conditions that match approximately to the real asimuth of 270° and under the 62° descent angle on the "Kapija" city square in Tuzla.

Execution date:

The testing was realized on August 25th 2014.

The scene:

Corresponding to the dimensions on the "Kapija " city square in Tuzla with the following objects, as given in APPENDIX 1.

- "NIK" store building, brick building;
- the facade of "Leonardo" coffee shop, wooden building,
- the facade of "Kapija" store, wooden building,
- the facade of "Obuca Beograd" shop, wooden building,
- the facade of "Vodoinstalater" shop, wooden building,
- the facade of "Seljanka" store, wooden building,
- the facade of "Samoizbor" store, wooden building,
- the facade of "Gulam"coffee shop, wooden building,
- the facade of "Kapija" coffee shop, wooden building,
- the facade of "Borac" store, wooden building,

Human figure models layout:

The human figure models were placed on characteristic points, and their layout is shown on figure 31

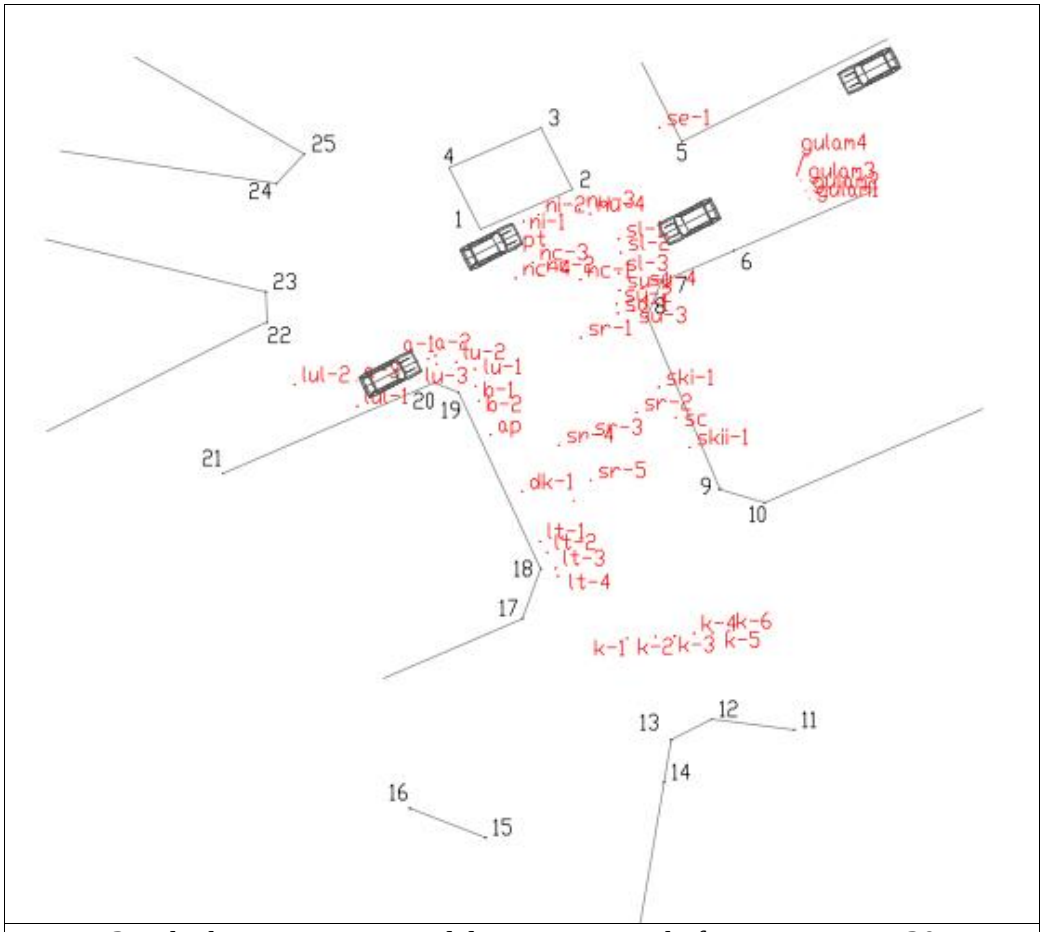

Figure 31 The human testing models arrangement before activating 130mm OF 482M projectile on the scene "Kapija" city square

The position of the vehicle:

The vehicle, type "Golf 1" was placed in relation to the "NIK" store object and the projectile according to the Testing Programme (Appendix 3 of the Programme), at the point obtained by radius section 2,65m and 5,60m. At that point the projectile could have been placed under the minimal angle of 69°, which is why the expert team decided, to place the projectile in the same direction in which it is possible to attain the projectile angle of 62°, figure 32.

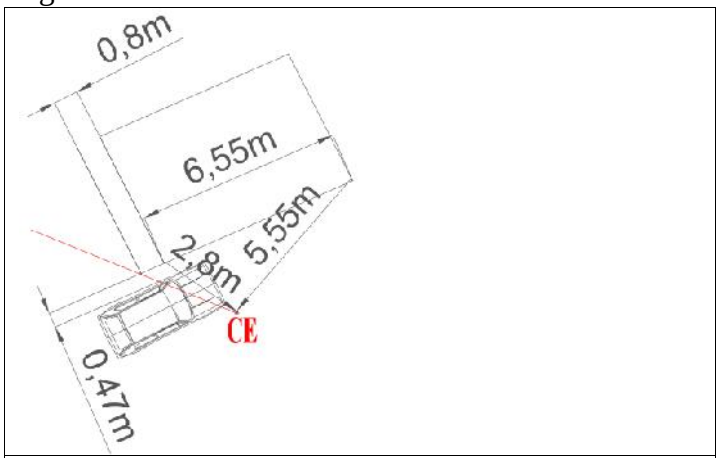

Figure 32 – The position of vehicle and the projectile before detonation

Translation

The vehicle, type “Golf 1“ was placed in relation to the “NIK“ store object and the projectile according to the Testing Programme (Appendix 3 of the Programme), at the point obtained by radius section 2,65m and 5,60m. At that point the projectile could have been placed under the minimal angle of 69°, which is why the expert team decided, to place the projectile in the same direction in which it is possible to attain the projectile angle of 62°, figure 32.

The surface:
The vehicle and projectile are placed on the granite cubes surface

Angle under which the projectile was activated:

The projectile was activated at the 62° angle to the horizon.

Projectile orientation:

Direction of longitudinal axis of projectile corresponds to the real asimuth of 270°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 30-81,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),
- Mass charachter: - -

The position of the vehicle after the explosion:

The vehicle, type “Golf 1“ after the explosion was pushed back 45 cm and 47cm to the side in relation to the starting position, figure 33.

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INTERNAL

Translation

Translation

Figure 33 - The place of explosion of the 130 mm OF-482M. *In the centre of the red circle is the explosion centre.*

Registered hits on human figure models:

Review of registered hits on human figure models after the explosion is shown in APPENDIX 10.

Photos of effects on the scene

- The shopwindow of “NIK“ store building, DSCN9978 until DSCN9987,
- the facade of “NIK“ store building, DSCN9993, DSCN9994, DSCN0013 until DSCN0,
- the facade of “Leonardo“ coffee shop, DSCN9996 and DSCN9997,
- the facade of “Kapija“ store, DSCN9992,
- the facade of “Samoizbor” store, DSCN0005 and DSCN0006,
- the facade of “Gulam”coffee shop, DSCN0001 until DSCN0004,
- the facade of “Seljanka“ store, DSCN9998,
- the facade of “Kapija” coffee shop, DSCN0005,
- the facade of “BiH Lottery”, DSCN0011 and DSCN0012.

Recorded material:

- Video materials (GOPR5290, Video 00874),
- Photographs (DSCN9854 until DSCN9854)

The photographs and the video materials can be found in the folder titled "Examination point 2.4.1"on the accompannying DVD no.3 which is an integral part of the Report.

2.4.2 The activation of 130mm OF-482-M placed under 62° angle in relation to the horizon and by the vehicle "Golf 1" on the scene of "Kapija " city square.

Testing Aim:

The testing aim is to determine the approximate depiction of pieces allocation of the 130 mm OF-482M projectiles activated under the conditions that match approximately to the real asimuth of 270° and under the 62° descent angle on the "Kapija" city square in Tuzla.

Execution date:

The testing was realized on September 04th 2014.

The scene:

Corresponding to the dimensions on the "Kapija " city square in Tuzla with the following objects, as given in APPENDIX 1.

- "NIK" store building, brick building;
- the facade of "Leonardo" coffee shop, wooden building,
- the facade of "Kapija" store, wooden building,
- the facade of "Obuca Beograd" shop, wooden building,
- the facade of "Vodoinstalater" shop, wooden building,
- the facade of "Seljanka" store, wooden building,
- the facade of "Samoizbor" store, wooden building,
- the facade of "Gulam"coffee shop, wooden building,
- the facade of "Kapija" coffee shop, wooden building,
- the facade of "Borac" store, wooden building,

Human figure models layout:

The human figure models were placed on characteristic points, and their layout is shown on figure 34.

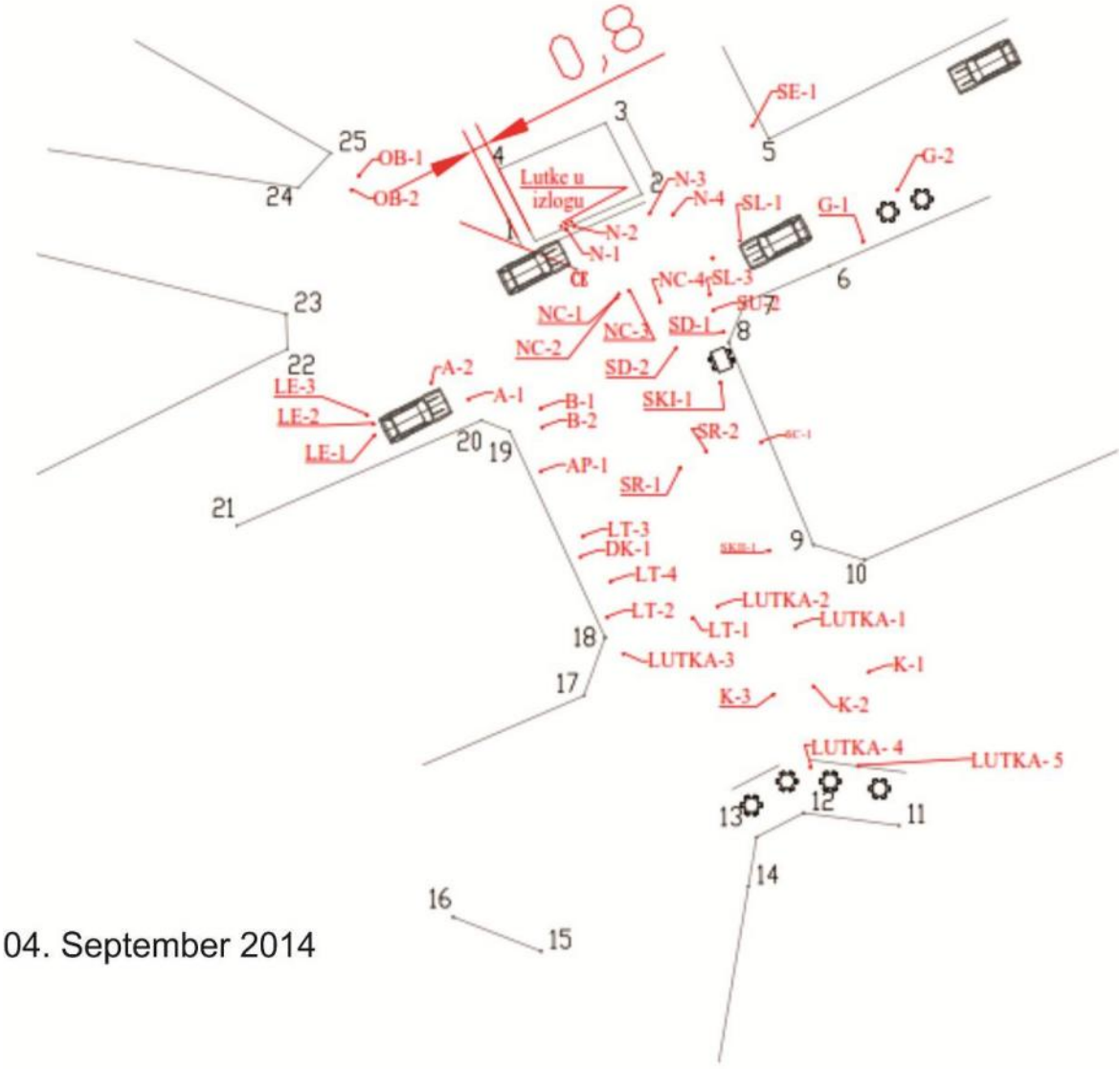

Figure 34 The human testing models arrangement before activating projectile on the scene "Kapija" city square

The position of the vehicle:

The vehicle, type "Golf 1" was placed in relation to the "NIK" store object and the projectile according to the Testing Programme (Appendix 3 of the Programme), at the point obtained by radius section 2,65m and 5,60m. At that point the projectile could have been placed under the minimal angle of 69°, which is why the expert team decided, to place the projectile in the same direction in which it is possible to attain the projectile angle of 62°, figure 35.

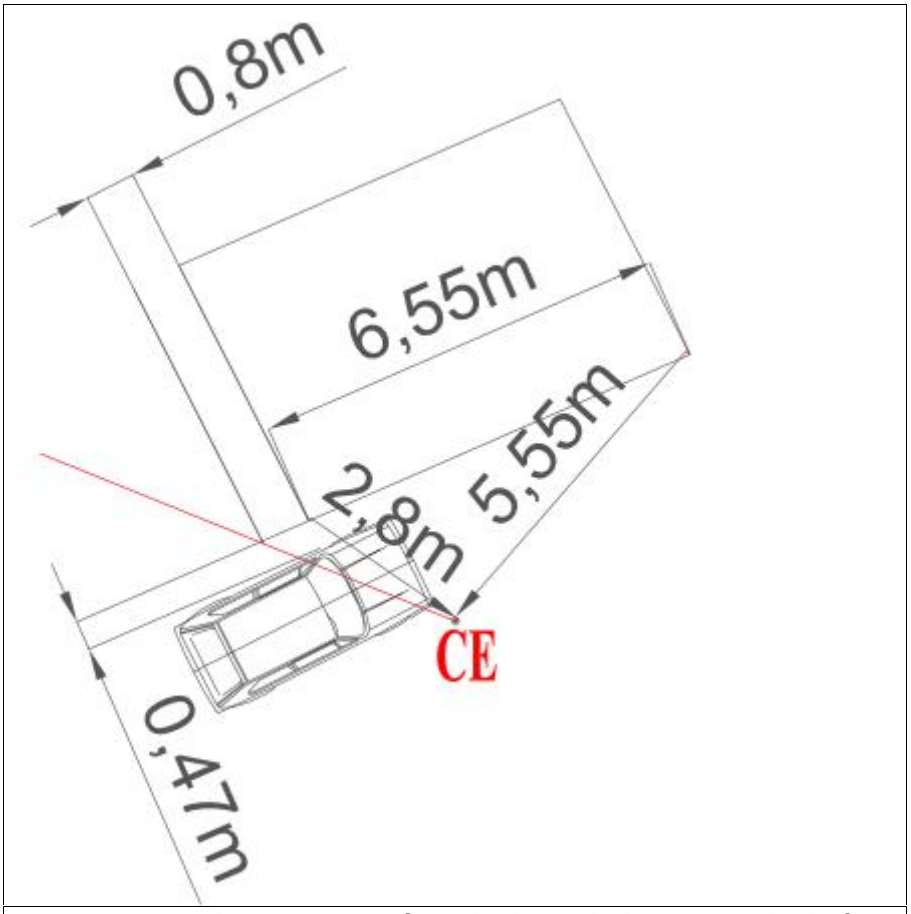

Figure 35 – The position of vehicle and the projectile before detonation projectiles 130 mm OF 482M

The surface:
The vehicle and projectile are placed on the granite cubes surface

Angle under which the projectile was activated:

The projectile was activated at the 62° angle to the horizon.

Projectile orientation:

Direction of longitudinal axis of projectile corresponds to the real asimuth of 270°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 30-81,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),
- Mass charachter: - -

The position of the vehicle after the explosion:
The vehicle, type “Golf 1“ after the explosion was pushed back 45 cm and 47cm to the side in relation to the starting position, figure 36.

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Translation

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INTERNAL

Translation

Figure 36 - The place of explosion of the 130 mm OF-482M projectile

Registered hits on human figure models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 11.

Photos of effects on the scene

- The shopwindow of "NIK" store building, PICT0333, Video 01039 izlog 04.septembar 2014 ,
- the facade of "NIK" store building, PICT0312
- the facade of "Leonardo" coffee shop, PICT0298,
- the facade of "Samoizbor" store, PICT0344,
- the facade of "Seljanka" store, DSCN9827,
- the facade of "Kapija" store, PICT0323.

Recorded material:

- Video materials (Video 01038 od 04. septembra 2014, UB 1 od 04. septembra 2014, Video od 04. septembra, snimak iz vazduha, Video 01039 izlog 04.septembar 2014),
- Photographs (DSCN9843 until DSCN9938 and PICT0312)

The photographs and the video materials can be found in the folder titled "Examination point 2.4.2"on the accompannying DVD no.4 which is an integral part of the Report.

2.4.3 The activation of 130mm OF-482-M projectile placed at the 20° angle to the horizon and by the vehicle "Golf 1" on the scene of "Kapija " city square.

Testing Aim:

The testing aim is to to test the thesis of explosion projectile 130 mm at an angle of 20 °according to the forensic expert Vlada Kostić.

Execution date:

The testing was realized on August 29th 2014.

The scene:

Corresponding to the dimensions on the "Kapija " city square in Tuzla with the following objects, as given in APPENDIX 1.

- "NIK" store building, brick building;
- the facade of "Leonardo" coffee shop, wooden building,
- the facade of "Kapija" store, wooden building,
- the facade of "Obuca Beograd" shop, wooden building,
- the facade of "Vodoinstalater" shop, wooden building,
- the facade of "Seljanka" store, wooden building,
- the facade of "Samoizbor" store, wooden building,
- the facade of "Gulam"coffee shop, wooden building,
- the facade of "Kapija" coffee shop, wooden building,
- the facade of "Borac" store, wooden building,

Human figure models layout:

The human figure models were placed on characteristic points, and their layout is shown on figure 37.

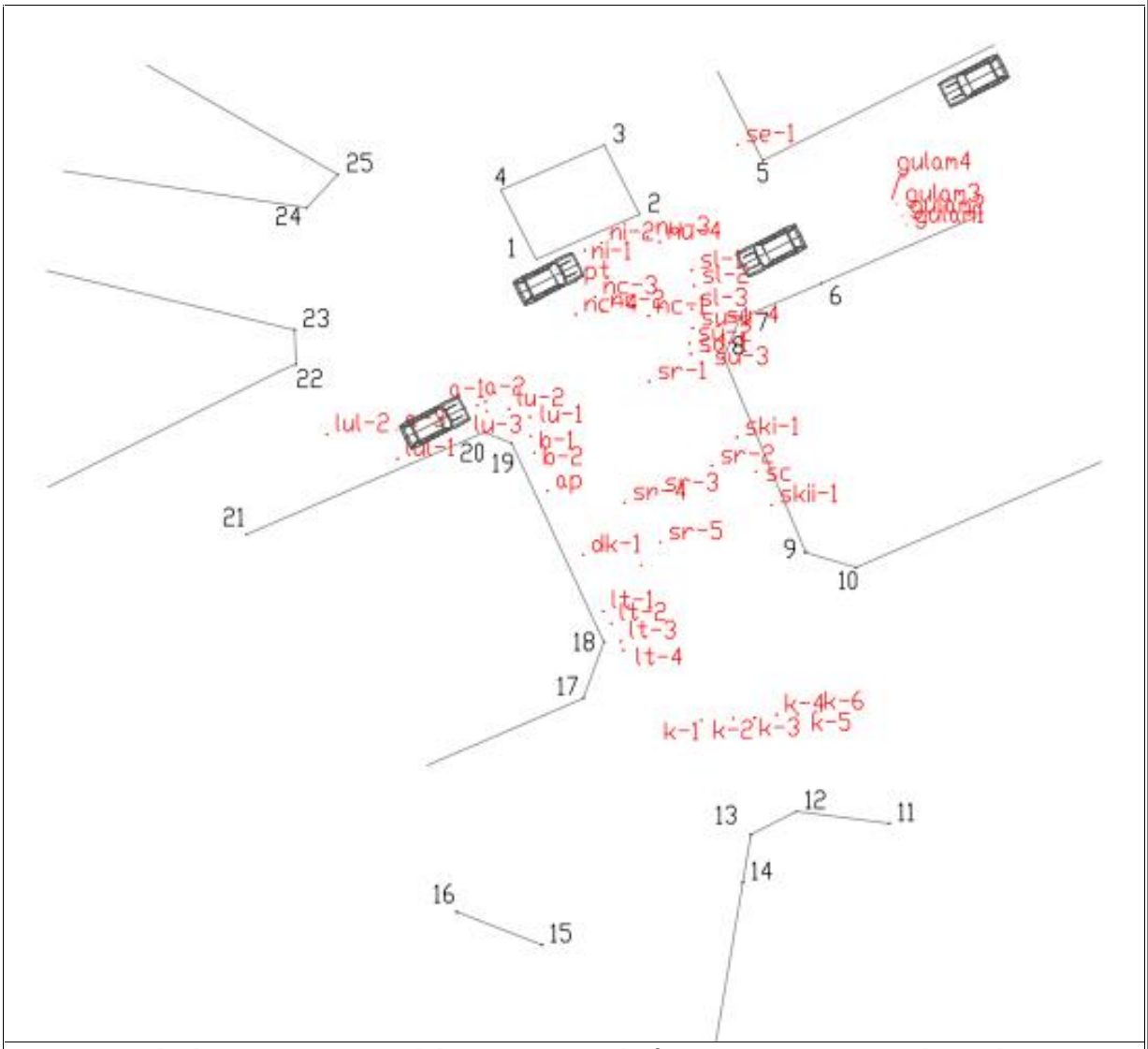

Figure 37 The human testing models arrangement before activating projectile on the scene "Kapija" city square

The position of the vehicle:

The vehicle, type "Golf 1" is placed in relation to the „NIK" store object and in relation to the projectile, defined by court forensic expert Vlada Kostic, figures 38 and 39.

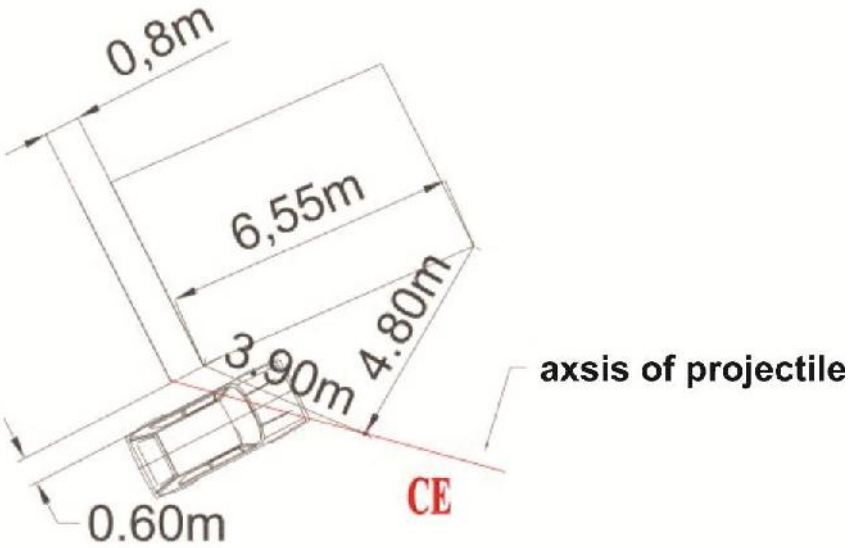

Figure 38 – The direction and point in which the projectile 130 mm is placed, Nikinci testing ground, on August 29, 2014.

Figure 39 – The projectile 130 mm OF 482-M at an angle of 20 °

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Translation

Figure 39a - The place of explosion of the 130 mm OF-482M on August 29, 2014.

The bottom of projectile is 7,57m away from the entrance door of "Samoizbor" ***store.***

The surface:

The vehicle and projectile are placed on the granite cubes surface

Angle of the projectile activation:

The projectile was activated at 20° angle to the horizon.

Projectile orientation:

Direction of longitudinal axis of projectile corresponds to the real asimuth of 90°.

Projectile data:

- Type of projectile: High explosive 130 mm OF 482-M,
- Projectile series: 80 30-81,
- Explosive charge: TNT, with smoke insert,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8912 (fuse prepared for static activation),
- Mass charachter: - -

The position of the vehicle after the explosion:

The vehicle, type “Golf 1“ after the explosion was pushed back 25 cm in relation to the starting position, figure 40.

Figure 40 The place of explosion of the 130 mm OF-482M

Registered hits on human figure models:

The furthest hit from the place of explosion was registered on a human figure

model at 22,30m in the direction of “Kapija” coffe shop.

The crater on the place of explosion:
A crater formed at the place of explosion is 90 cm x 60 cm in size and no cubes were ejected from the crater, figure 41.

Figure 41 - The crater on the place of explosion at Testing Ground Nikinci, August 29, 2014.

Photos of effects on the scene

- The shopwindow of “NIK“ store building, DSCN9816 until DSCN9817,
- the facade of “NIK“ store building, DSCN9830,
- the facade of “Leonardo“ coffee shop, DSCN9824 and DSCN9814,
- the facade of “Samoizbor” store, DSCN9825,
- the facade of “Seljanka“ store, DSCN9827,
- the facade of “Kapija“ store, PICT0323.
- the facade of “Kapija” coffee shop, DSCN982,
- the facade of “Obuca Beograd“ shop, DSCN9820.

Recorded material:

- Video materials (GOPR5294, GOPR5295, UB 1M3 od 29. avgusta 2014),
- Photographs (DSCN9836 until DSCN9781)

The photographs and the video materials can be found in the folder titled "Examination point 2.4.3"on the accompannying DVD no.5 which is an integral part of the Report.

2.5 THE EFFECT of EXPLOSIVES on HUMAN TESTING MODELS AND THE "GOLF 1"

2.5.1 The evaluation of the effect of explosion of 2,4kg PEP-500 explosive activated on the granite cubes surface directly in front of "Golf 1" vehicle.

The testing aim:

The testing aim is to determine the effects of the explosion of 2,4 kg of PEP-500 plastic explosive placed on the granite cubes surface in front of "Golf 1" vehicle.

Date of execution:

The experiment was realised on August 15, 2014.

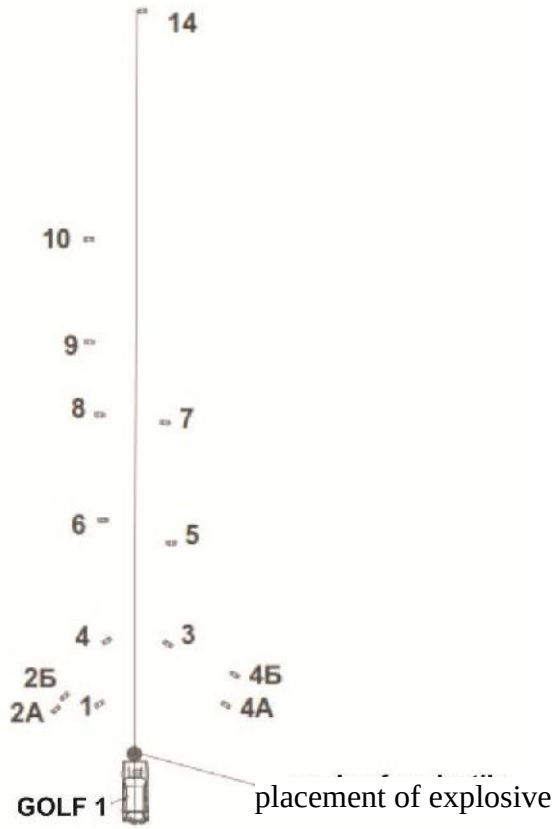
The surface:

The surface is an existing road from granite cubes used for the movement of heavy vehicles (trucks) over a long period of time.

Human figure models layout:

The human figure models were placed on characteristic points, and their layout is shown on photos 32 and 43.

Translation



Photograph 42 – The layout of human figure models before the activation of 2,4 kg of plastic explosives in front of “Golf 1“ vehicle

Translation

Figure 43 –The video of the effect of PEP 500 explosive in front of "Golf 1" vehicle, before, during, and after the explosion.

The Setup:

2,4 kg of PEP 500 explosive was placed on the granite cubes surface, in front of "Golf 1" vehicle,. Next to the explosive, a side deflector made of steel tin was placed. Around the explosive, random granite cubes were placed, on which a certain ammount of used motor oil was spilled. On such a formed pile, a bag containing 250 g of hunting gunpowder was placed, figure 44.

Figure 44– The placed plastic explosive under the bumper of "Golf 1" immediately before activation.

Registered hits on human figure models:

Review of registered hits on human testing models after the explosion is shown in APPENDIX 12.

The position of the vehicle after the explosion:

The vehicle, type “Golf 1“ after the explosion was pushed back 2,5 cm in relation to the starting position, figure 45.

Figure 45 – The vehicle after explosion of 2,5 kg of PEP 500 explosive placed under the bumper (photograph *PICT0125)*

A crater formed at the place of explosion, figure 46.

Figure 46 – The place of explosion of 2,5 kg of PEP 500 explosive placed under the bumper (*photograph DSCN0027*).

Recorded material:

- Video materials (GOPR5277, UB 2 od 15.avgusta 2014.god.),
- Photographs (PICT0093 until PICT0153 and DSCN9981 until DSCN DSCN9999 and DSCN0002 until DSCN0032)

The photographs and the video materials can be found in the folder titled "Examination point 2.5.1"on the accompannying DVD no.6 which is an integral part of the Report.

2.6 THE EFFECT OF THE EXPLOSIVES ON THE SURFACE AND THE HUMAN FIGURE

2.6.1 The evaluation of the exposion impact of 1kg of PEP 500 plastic explosive on the granite cubes surface.

The aim of the experiment:

The aim of the experiment is to determine the effect of explosion of 1kg of plastic explosive on the granite cubes surface.

Date of execution:

The experiment was realized on August 11, 2014.

The preparation of the surface:

The surface was built from granite cubes which were placed on a layer of packed gravel 30 cm, thick. Around the cubes surface a concrete band was built.

The layout of human figure models:

The human figure models were placed at the 1,5 to 15 m distance from the place of explosion.

Layout :

The surface was layered with 14 granite cubes in two rows, as shown on the figure 47, left. In front of this cube row, a backpack with 1kg of PEP 500 explosive was placed and in front of the backpack a pile of rocks, screws and nuts. This pile was covered with used motor oil, figure 47, right.

Figure 47 – The placement of 1 kg of PEP 500 plastic explosive on the granite cubes surface.

The appearance of the place of explosion is shown on figure 48. After the explosion, a crater was formed on the granite cubes surface, and the human testing models, which were the closest to the place of explosion were thrown back, figure 45 (photograph DSCN9859). The human figure model which was the closest to the point of explosion was devastated, photograph DSCN9854.

Figure 48 – The place of explosion of the 1 kg, PEP 500 explosive.

Recorded material:

- Video materials (GOPR5272, UB 3, 11th August 2014) ,
- Photographs (DSCN9836 until DSCN9868)

The photographs and the video materials can be found in the folder titled "Examination point 2.6.1"on the accompannying DVD no.6 which is an integral part of the Report.

2.6.2 The evaluation of the effects of the explosion for the 2,5 kg of the PEP 500 explosive on granite cubes surface.

The aim of experiment:

To aim of experiment is to determine the effect of explosion of 2,5 kg of plastic explosive on the granite cubes surface.

Date of execution:

The experiment was realized on August 15, 2014.

The surface:

The surface is an existing road from granite cubes used for the movement of heavy vehicles (trucks) over a long period of time.

Human testing models layout:

The layout of human testing models in relation to the installation location of explosives is shown on figures 49 and 50.

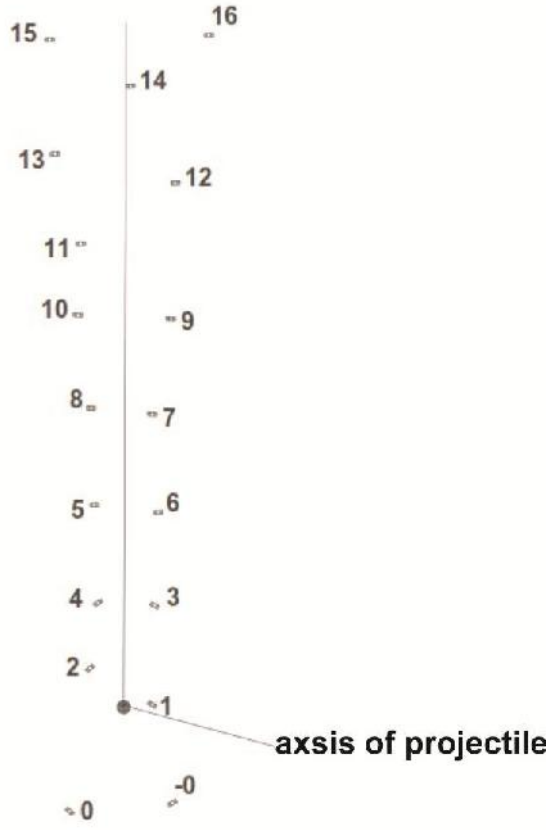


Figure 49 – The layout of human testing models before the activation of 2,5 kg of plastic explosives

Figure 50 – Airborne footage of the place of explosion of 2,5 kg of plastic explosive.

The layout :

On the granite cubes surface, 2,5kg of PEP 500 explosive was placed, and above the explosive a steel tin deflector, underpinned by a metal wedge from the back side, figure 51, right. In front of the explosive, at a distance of about 25 cm, a metal wedge with a part above ground of around 4cm, figure 53. In front of the explosive, granite cubes were placed, covered with a certain ammount of nails, nuts and bolts, which were all covered in used motor oil and 250g of hunting gunpowder.

Figure 51 - 2,5 kg explosives immediately before activation
1- Tin deflector

Photograph 52 – A metal wedge was nailed in front of the explosive at about 25cm

A crater formed on the place of explosion, with land residue around the crater, figure 53.

Figure 53 – The appearance of the place after the explosion where the explosive was activated.

Registered hits on human figure models:

Review of registered hits on human figure models after the explosion is shown in APPENDIX 13.

The distance from the nut fall place to the centre of explosion is 40m and it is shown on photographs DSCN9975 и DSCN9976.

Recorded material:

- Video materials (GOPR5276, UB 1 od 15. 08. 2014. g. eksploziv),
- Photographs (PICT0014 until PICT0085 and DSCN9888 until DSCN9901)

The photographs and the video materials can be found in the folder titled "Examination point 2.6.2"on the accompannying DVD no.6 which is an integral part of the Report.

2.6.3 The Evaluation of the effects of explosive on the granite cubes surface.

The aim of the examination:

The control of the effects of TNT on granite cubes surface.

Date of execution:

The experiment was realized on August 05, 2014.

Type of explosive:

Pressed TNT, 200g package, with plastic wrap.

The ammount of explosive: 2,4 kg

The preparation of granite cubes surface:
The surface was built 24 hours prior to the testing. On a gravel surface 30cm thick, granite cubes were placed which were surrounded by concrete band. A vibrator was used to stabilise the surface, figure 54.

Figure 54 – The making of surface for the activation of explosive

The 2,4 kg of explosive (12 pieces of pressed TNT)were placed in the middle of the granite cubes surface.

Figure 55 - Explosive and surrounding granite.

Eight human testing models were placed at the distance of about 3,5 m around the explosive, figure 56.

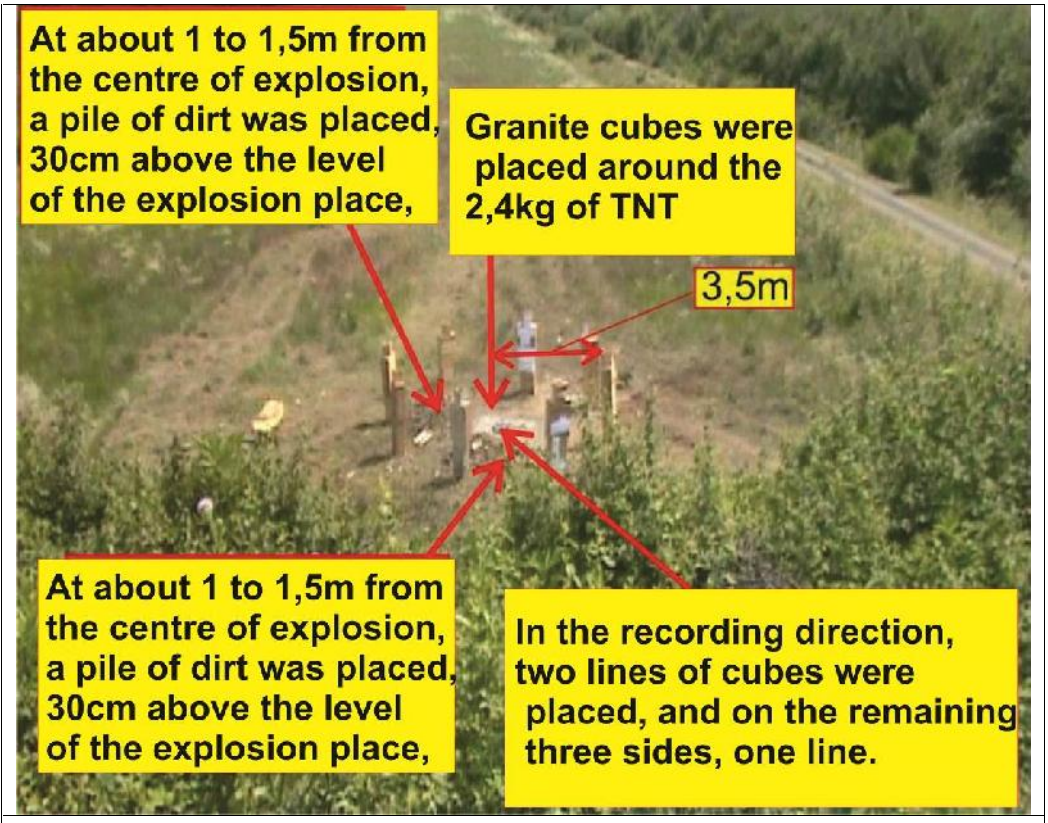


Figure 56 – The scene with 2,4kg of explosive immediately before activation.

After the explosion all of the models have fallen, except for two, which were opposite to the side, where two rows of granite cubes were placed around the explosive, figure 57.

Figure 57 – The appearance of the scene before, during and after the explosion.

After the explosion, a crater was formed, 120cm in diameter and 35cm deep, filled with cubes, figure 58.

Figure 58 – The appearance of the place where 2,4 kg TNT was activated.
The board over the crater was added later, for measurement of depth of the crater.

Several pieces of granite cubes, were found in the radius of 10m from the place of explosion, figure 59.

Figure 59 – The pieces of granite cubes which were found.

Recorded material:

- Video materials (M2U01400, M2U01401 and Proba sa 2,4kg TNT 5.08.2014),
- Photographs (PICT0916 until PICT0939)

The photographs and the video materials can be found in the folder titled "Examination point 2.6.3"on the accompannying DVD no.7 which is an integral part of the Report.

2.6.4 Test explosions with different ammounts of explosives.

The aim of testing:
The aim of the testing is to determine the limit of material effect of different ammounts of PEP 500 explosive on the surface and the human figure models.

Date of execution:

The experiment was realized on August 26, 2014.

The surface:

The surface is an existing road from granite cubes used for the movement of heavy vehicles (trucks) over a long period of time.

The ammounts of explosive: The tests were conducted using 250g, 500g and 1000g of PEP 500 explosives.

The model layout: The models were placed at the distance shown in table 1, around the place of the explosion:

Table 1- The model layout in relation to the position of the explosive.

Model Number	Distance from the centre of explosion
	m
K-1	9,2
K-2	8,65
K-3	7,3
K-4	9,45
K-5	10
K-6	9,75

Recording:

All tests were recorded by a camera, and the effects were shown on:

- Video materials (DSCN9726 until DSCN9780),
- Photographs (DSCN9725, DSCN9734 and DSCN9749)

The photographs and the video materials can be found in the folder titled "Examination point 2.6.4"on the accompannying DVD no.7 which is an integral part of the Report.

2.6.5 The evaluation of the effects of explosion of 2,6kg of TNT on granite cubes surface

The aim of experiment:

To aim of experiment is to determine the effects of explosion of 2,6 kg of TNT on the granite cubes surface.

Date of execution:

The experiment was realized on August 11, 2014.

The preparation of the surface:
The surface is made of granite cubes, which were placed on a layer of pressed gravel, 30 cm thick. Around the surface with the cubes, a concrete band was

built. Before this test 1 kg of PEP 500 was actovated on the same surface.

The layout of human testing models:

The human testing models were placed at the 1,5 to 15 m distance from the place of explosion.

Layout:

Granite cubes were placed around the explosive, as shown in figure 60.

Figure 60 – The layout for 2,6kg of TNT on the granite cubes surface.

After activation greater crater was formed, surface was completely destroyed and the results were not considered because the explosives was placed in a location that has already been damaged by a previous explosion of plastic explosives.

Recorded material:

- Video materials (GOPR5272, UB 4 od 11.avgusta 2014.god.),
- Photographs (DSCN9888 until DSCN9901)

The photographs and the video materials can be found in the folder titled "Examination point 2.6.5"on the accompannying DVD no.8 which is an integral part of the Report.

2.7 THE EFFECT OF 155mm M107 PROJECTILE ON HUMAN FIGURE MODELS

2.7.1 The activation of 155mm M107 projectile placed at 90° angle to the horizon.

Testing Aim:

The testing aim is to determine the depiction of the pieces allocation of the 155 mm M107 projectiles activated at 20° angle to the horizon.

Date of execution:

The experiment was realized on August 01, 2014.

Human testing models layout:

The human testing models were placed on characteristic points, and their layout is shown on figures 61 and 62.

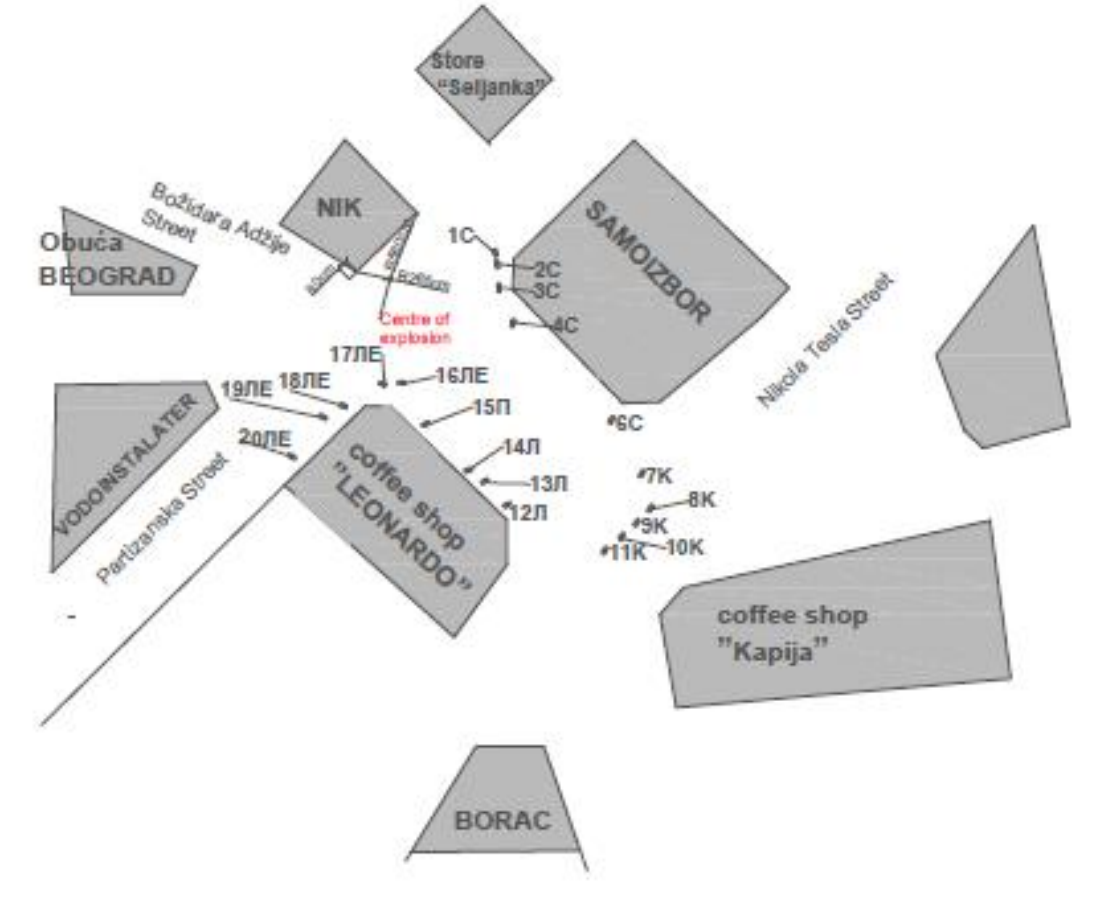


Figure 61 – The layout of human testing models during the check of projectile pieces spread upon activation of 155 mm M107 projectile placed at 90° angle to the horizon.
Marked objects are fictious objects that match the position of objects on the "Kapija" city square in Tuzla.

Translation

Figure 62 – The layout of human figure models during the check of projectile pieces spread upon activation of HE 155 mm M107 projectile placed at 90° angle to the horizon.

Angle of the projectile activation:

The projectile was activated at 90° angle to the horizon.

The position of the projectile:

The position of the projectile is shown on figure 63.

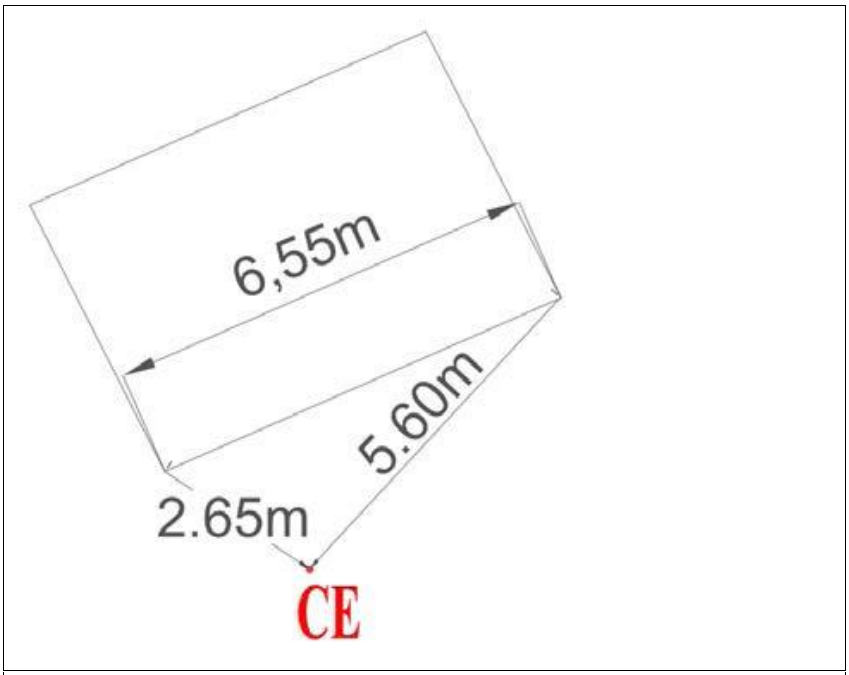


Figure 63 – The surface on which the 155 mm M107 projectile was activated at 90° angle to the horizon
– *`CE` Centre of explosion*

Projectile data:

- Type of projectile: High explosive 155 mm M107,
- Projectile series: RZK 7706,R,
- Guiding ring: copper,
- Explosive charge: TNT,
- Mass charachter: ++,
- Fuse: UTIU, M72B1,
- Fuse series: SRB 8914 (fuse prepared for static activation),

Results:

The projectile deflagrated and the results from the shell burst have not been evidented, because of the incomplete detonation. The place of explosion is shown on figure 63.

Figure 63 – The place of activation of 155 mm M107 projectile after deflagration. White marks were caused by disbursement of the explosive. *(photograph PICT0532)*

Recorded material:

- Video materials (Video 00004 od 31. jula 2014, TF 130mm ugao 61 и Video 00007 od 31. jula 2014, TF 130mm ugao 61),
- Photographs (PICT0241 until PICT0334 и DSCN5483 until DSCN DSCN5544)

Translation

The photographs and the video materials can be found in the folder titled "Examination point 2.7.1"on the accompannying DVD no.8 which is an integral part of the Report.

3 CONCLUSION

The Technical Testing Centre has fully completed, all of the points of the programme "Determining the effect of impact of explosive ordnance under static activation, under approximate conditions of the "Kapija" city square in Tuzla on May 25th, 1995 at 20.55 hours," for the needs of the Republic of Srpska Centre for the research of war, war crimes and search for missing persons as well as additional testing per request of the defence team experts.
The representatives of the Republic of Srpska Centre for the research of war, war crimes and search for missing persons, and the experts in the defence team did not have any objections to the realized testing ground examinations.

DIRECTOR
Colonel
Prof. Slobodan Ilić, *PhD*.

Translation

APPENDIX 1

The sketch and photograph of the objects layout on the “Kapija” square in Tuzla

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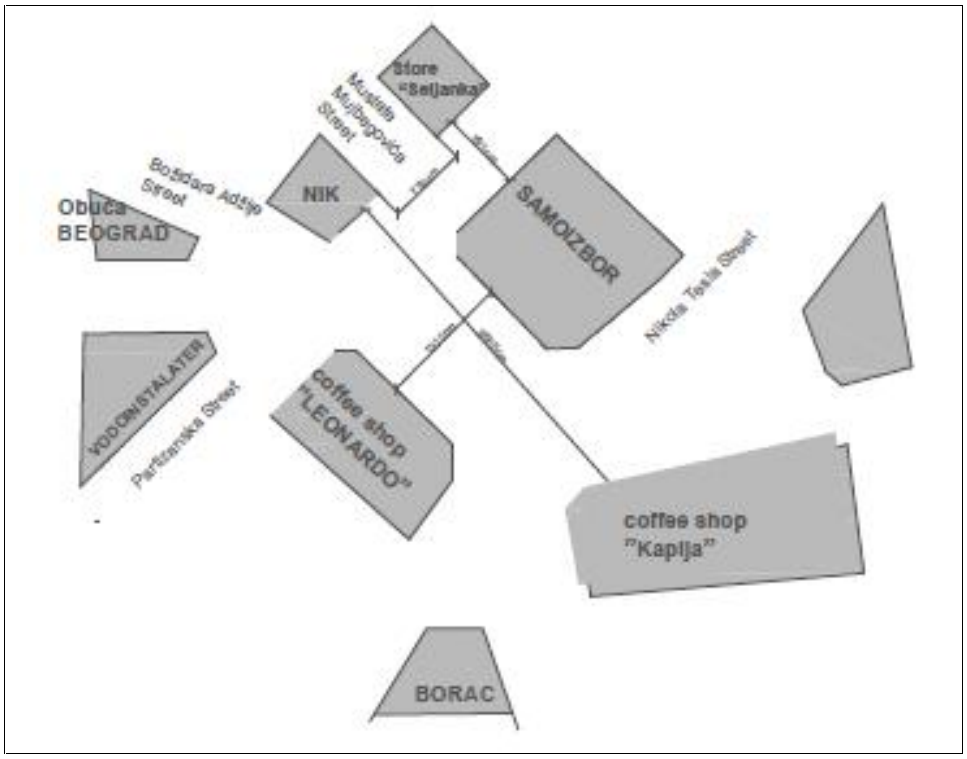
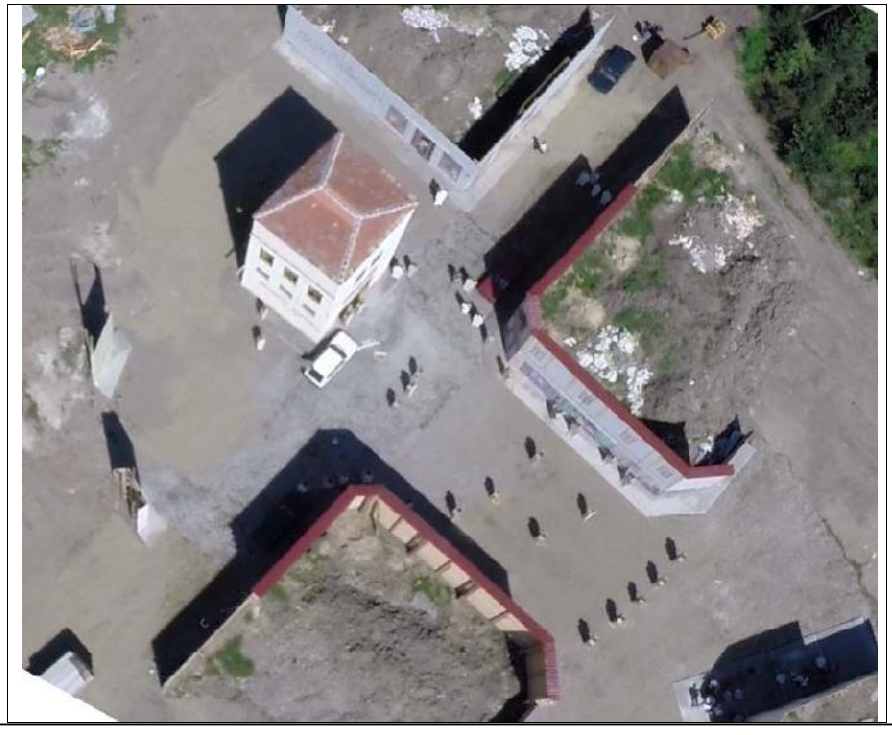
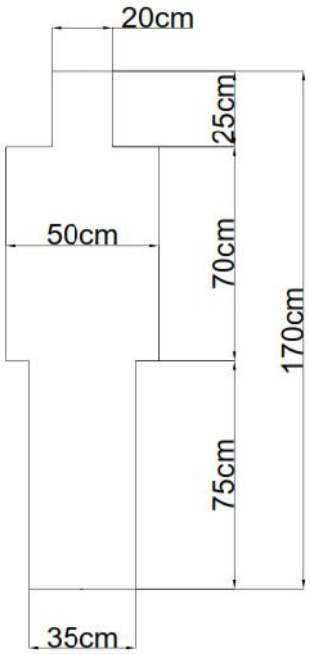
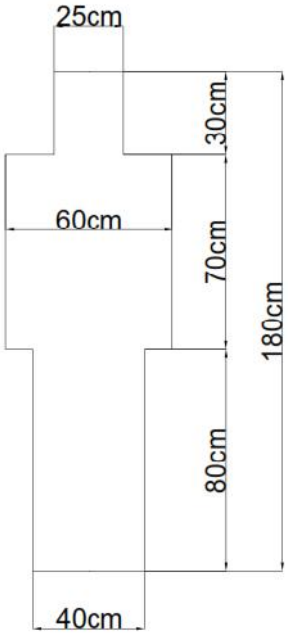
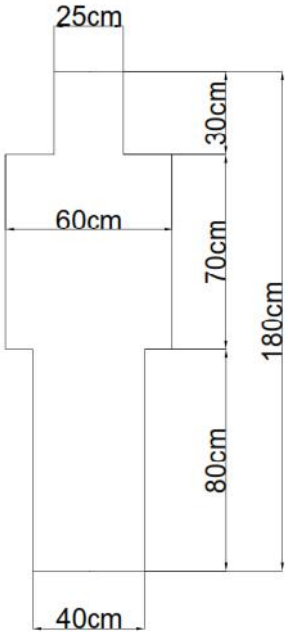




APPENDIX 2

The appearance of the human testing model

<table>
<tr><td>  </td><td> 
</td></tr>
<tr><td>a) General appearance of human figure model
D= 25 cm for man figure
D= 20 cm for woman figure</td><td>b) Woman figure, front profile</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>c) Man figure - smaller, front profile</td><td>d) Man figure - larger, front profile</td></tr>
</table>

TOC–12–1385
INTERNAL

Translation

APPENDIX 3

Overview of registered hits on models of human figures after explosion of 130 mm M79 HE projectile placed under the angle of 61°, July 31. 2014..

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from „CE“ after explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
1C	8,40	8,40	one board broken off in the area of the back	none												PICT0297, PICT0300
2C	8,36	8,36	one board broken off in the area of the stomach	none			1							90	90	PICT0301, PICT0302
3C	7,11	7,11	board broken off from the front and three boards from the back	none	1									172	172	PICT0305, PICT0308
4C	8,40	8,40	one board broken off in the stomach area	none		1								135	135	PICT0309
5C	10,10	10,10		none			1							115	115	PICT0313
6C	20,60	20,60		none												PICT0301
7K	24,70	24,70		none												PICT0253

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from „CE“ after explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
8K	27,00	27,00		none												DSCN5500
9K	27,20	27,20		none												DSCN5501, PICT0257
10K	27,40	27,40		none												DSCN5502, PICT0259
11K	27,30	27,30		none												PICT0261
12Л	20,00	20,00		none												PICT0263
13Л	17,40	17,40		none												PICT0265
14Л	16,00	16,00		none												PICT0267
15П	11,60	11,60	two board broken off	none				1						171	185	PICT0269, PICT0270, DSCN5541
16ЛЕ	8,0	18,0	over thrown after the explosion	none	2	1	5	1				5	7	22	138	PICT0327
17ЛЕ	8,3	18,3		none	2	3	6					3	3	9	173	PICT0331
18ЛЕ	10,6	10,6		none		2			1			1	2	34	142	DSCN5537, DSCN5519

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from „CE“ after explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
19ЛЕ	12,0	12,0		none				1		1	1		2	23	149	PICT0335
20ЛЕ	12,8	12,8		none			1			2	1	1	1	26	152	DSCN5531

**The photographs can be found in the folder titled " Examination point 2.2.1 „on the accompannying DVD no.1 which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 4

Overview of registered hits on models of human figures after explosion of 130 mm M79 HE projectile placed at the angle of 30°, July 31. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from „CE“ after explosion	The condition of the model after the explosion	Traces of soot	The place number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
1C	8,40	8,40		none												
2C	8,36	8,36		none												
3C	7,11	7,11		none												
4C	8,40	8,40		none												
5C	10,10	10,10		none												
6C	20,60	20,60		none												
7K	24,70	24,70		none												
8K	27,00	27,00		none												
9K	27,20	27,20		none												

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from „CE“ after explosion	The condition of the model after the explosion	Traces of soot	The place number of hits on the model, in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
10K	27,40	27,40		none												
11K	27,30	27,30		none												
12Л	20,00	20,00		none												
13Л	17,40	17,40		none												
14Л	16,00	16,00		none												
15П	11,60	11,60		none												
16ЛЕ	8,0	18,0		none		1	1		1				3	18	137	PICT0363
17ЛЕ	8,3	18,3		none		1	1					3	3	19	164	PICT0360
18ЛЕ	10,6	10,6		none								3	4	12	75	PICT0364
19ЛЕ	12,0	12,0		none	1			1	2			1		43	178	PICT0365
20ЛЕ	12,8	12,8		none					1				2	74	120	PICT0366

**The photographs can be found in the folder titled "Examination point 2.2.2 „on the accompannying DVD no.1 which is an integral part of the Report.*

Translation

APPENDIX 5

Overview of registered hits on models of human figures after explosion of 130 mm M79 HE projectile placed under the angle of 90°, August 01. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the ‘’Center of the explosion”after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
1C	8,40	8,40	dirt marks				3					4	3	11	121	PICT0581
2C	8,36	8,36	overturned			1		2	1			2	3	7	125	PICT0582
3C	7,11	7,11	overturned			4	3	4	1		2		2	22	167	PICT0583
4C	8,40	8,40			2	3	1		3		1	2	2	12	172	PICT0584
5C	10,10	10,10				2	1			2	1	1	1	18	146	PICT0585
6C	20,60	20,60										1		11	11	PICT0587
7K	24,70	24,70				1								171	171	PICT0588
8K	27,00	27,00						1				1		89	89	PICT0589
9K	27,20	27,20										1		58	58	PICT0590
10K	27,40	27,40														PICT0591
11K	27,30	27,30														PICT0592
12Л	20,00	20,00					2							94	94	PICT0593
13Л	17,40	17,40			1							2	2	8	176	PICT0594
14Л	16,00	16,00				2	1						1	34	158	PICT0595

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the ‘’Center of the explosion”after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
15П	11,60	11,60									1		1	26	169	PICT0596
16ЛЕ	8,0	18,0					1	1		1		1	1	33	170	PICT0597
17ЛЕ	8,3	18,3			1	3	2	1	1	1				112	173	PICT0598
18ЛЕ	10,6	10,6								1		4	2	10	83	PICT0599
19ЛЕ	12,0	12,0							1				1	77	118	PICT0600
20ЛЕ	12,8	12,8				1				1		2		39	150	PICT0601

**The photographs can be found in the folder titled “Examination point 2.2.3 „on the accompannying DVD no.1which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 6

Overview of registered hits on models of human figures after explosion of 130 mm M79 HE projectile placed under the angle of 43° August 01. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:								The height of the lowest hit	The height of the highest hit	Photos
					head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg		
	[m]	[m]												[cm]	[cm]	
1C	8,40	8,40	dirt marks				3					4	3	11	121	PICT0581
2C	8,36	8,36	overturned			1		2	1			2	3	7	125	PICT0582
3C	7,11	7,11	overturned			4	3	4	1		2		2	22	167	PICT0583
4C	8,40	8,40			2	3	1		3		1	2	2	12	172	PICT0584
5C	10,10	10,10				2	1			2	1	1	1	18	146	PICT0585
6C	20,60	20,60				2	1					1		11	11	PICT058
7K	24,70	24,70				1								171	171	PICT0588
8K	27,00	27,00						1				1		89	89	PICT0589
9K	27,20	27,20										1		58	58	PICT0590
10K	27,40	27,40														PICT0591
11K	27,30	27,30														PICT0592
12Л	20,00	20,00					2							94	94	PICT0593
13Л	17,40	17,40			1							2	2	8	176	PICT0594
14Л	16,00	16,00				2	1						1	34	158	PICT0595
15П	11,60	11,60									1		1	26	169	PICT0596

Translation

16ЛЕ	8,0	18,0					1	1		1		1	1	33	170	PICT0597
17ЛЕ	8,3	18,3			1	3	2	1	1	1				112	173	PICT0598
18ЛЕ	10,6	10,6								1		4	2	10	83	PICT0599
19ЛЕ	12,0	12,0							1				1	77	118	PICT0600
20ЛЕ	12,8	12,8				1				1		2		39	150	PICT0601

**The photographs can be found in the folder titled "Examination point 2.2.4 „on the accompannying DVD no.1 which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 7

Overview of registered hits on models of human figures after explosion of 130 mm OF 482-M HE projectile placed under the angle of 62° August 05. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
3	2,00	6,00	completely destroyed with a large number of penetrations	none										foot	top of the head	PICT0784, PICT0786
35	6,00	6,00	overturned	none	3	3	3	3	1	1	1	10	2	12	165	PICT0757, PICT0825
36	2,30	6,00	completely destroyed with a large number of penetrations	none										foot	top of the head	PICT0787
HH	2		devastated													raspored maketa 62 05.082014 -1 and raspored maketa 62 posle eksplozije 05.082014
1KOK	4,5m (behind the “Golf 1”)		behind the “Golf 1” vehicle	none								5	6	10	38	PICT0845
6C	4,5m (behind the “Golf 1”)		behind the “Golf 1” vehicle	none					1					95	95	PICT0843

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
XK	On the “Golf 1“ hood		thrown away 2m behind the “Golf 1“ vehicle, the chest and head parts devastated	none												Maketa sa haube 05.082014.62-1 И Maketa sa haube 05.082014.62-2
39	2,90	2,90	destroyed and overthrown	none			1					2		20	80	PICT0763, PICT0764
PA	3,10	3,10	overturned	none		2			2			3	2	35	160	PICT0758, PICT0759
119	3,00	3,00	overturned	none	5	6		1	1	1		6	3	13	171	PICT0764, PICT0765, PICT0790
18ЛЕ	13,40	13,40		none	1	4			2		1		2	15	152	PICT0818
1C	13,60	13,60		none			1						2	17	134	PICT0819
До18ЛЕ	13,40	13,40		none	2				2			1 сиги		38	180	PICT0817
63	7,60	7,60		none			4	1	1			1	1	56	124	PICT0798, PICT0799
Л63	7,90	7,90		none	6											

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg / left leg	[cm]	[cm]	
11K	9,50	9,50		none	1	1	1	1				3 / 2	8	195	PICT0822
До11K	9,25	9,25		none	5	4	4		1			1 / 2			PICT0823
10K	11,10	11,10		none											PICT0829
5C	11,50	11,50		none		3		1				2	55	135	PICT0830, PICT0831
1МП	11,60	11,60		none			2					1 / 1	7	97	PICT0836
1П	11,50	11,50		none											
1ЛЕ	9,40	9,40		none				1			1	1 / 1	78	175	PICT0838
3C	8,10	8,10		none		1	1	2	3			3 / 2	30	174	PICT0839
14 Л	10,60	10,60	overturned	none	1	2	4	1	4		1	2 / 4	14	185	PICT0840
12 Л	11,80	11,80		none			1						102	102	PICT0841
9 K	15,20	15,20		none					1				107	107	PICT0842

**The photographs can be found in the folder titled"Examination point 2.3.1 „on the accompannying DVD no.1 which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 8

Overview of registered hits on models of human figures after explosion of 130 mm M79 HE projectile at the angle of 31° August 11. 2014. .

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
3	2,00	6,00	completely destroyed with a large number of penetrations	none										foot	top of the head	DSCN9730
35	6,00	6,00	overturned	none	2	4	11	3	1	1	1	5	5	36	167	DSCN9732
36	2,30	6,00	completely destroyed with a large number of penetrations	none												DSCN9731
1Г	14,10	14,10		none		1						1		28	128	PICT1114
1СТ	8,50	8,50		none		1								8	144	PICT1115
2СТ	8,50	8,50		none									1	24	24	PICT1116
3СТ	7,72	7,72		none		2			1					100	140	PICT1117
63	7,53	7,53		none		1			2			2		10	123	PICT1118

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
18ЛЕ	10,20	10,20		none		1					1		1			DSCN9726
12 Л	5,00	5,00	destroyed and overthrown	none												DSCN9742
39	3,20	4,10	destroyed and overthrown	none												DSCN5621
119	2,95	4,10	destroyed and overthrown	none												DSCN5620
PA	3,65	5,10	destroyed and overthrown	none												DSCN9727
СК1	12,15	12,15		none												DSCN9737
СК2	12,15	12,15		none												DSCN9738
100	19,00	19,00		none												DSCN5625
101	19,00	19,00		none												DSCN5625
МП3	11,00	11,00		none			1		1					84	107	DSCN9739
МП1	9,30	9,30		none								2	3	36	75	DSCN9748

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
ЛОТО	14,00	14,00		none	1	1	1							70	145	DSCN9747
7К	9,14	9,14		none		1	2		3				1			DSCN9750
19ЛЕ	9,65	9,65		none	1	1				1			1			DSCN9751
П31	11,70	11,70	overturned	none	1			3	2			2	1	5	151	DSCN9756 , DSCN5631
ЛУ1	15,10	15,10		none		3	2	1	2			1	1	9	146	DSCN9757
МП2	6,20	6,20		none					1			1				DSCN5623
ХА	On “Golf 1” hood															DSCN5645

**The photographs can be found in the folder titled “Examination point 2.3.2 „on the accompannying DVD no.1 which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 9

Overview of registered hits on models of human figures after explosion of 130 mm OF 482-M HE projectile placed under the angle of 62°, August 11. 2014..

Model marking	Distance from the „Center of the explosion“ before the explosion [m]	Distance from the „Center of the explosion“ after the explosion [m]	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of: head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	The height of the lowest hit [cm]	The height of the highest hit [cm]	Photos
3	2,00	2,30	completely destroyed with a large number of penetrations	none										Од стопала	До врха head	DSCN9805, DSCN9804
35	6,00	6,00	overturned	none	2	2	1	6	1			4	5	20		DSCN9808
36	2,30	2,50	completely destroyed with a large number of penetrations	none												DSCN9805, DSCN9806
1Г	14,10	14,10		none			1							102	102	DSCN9815
1СТ	8,50	8,50		none		2			1					132	146	DSCN9816
2СТ	8,50	8,50		none	1		1						1	47	156	DSCN9817
3СТ	7,72	7,72		none		1								141	141	DSCN9818
63	10,30	10,30		none					1				1			DSCN9819
18ЛЕ	10,20	10,20		none				1	1			1	3	13	95	DSCN9821

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion [m]	Distance from the „Center of the explosion“ after the explosion [m]	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of: head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	The height of the lowest hit [cm]	The height of the highest hit [cm]	Photos
МП2	6,20	6,20		none	3	1	1	3	3			5		28	170	DSCN9824
СК1	12,15	12,15		none			2				1		2			DSCN9822
СК2	12,15	12,15		none		1						1				DSCN5672
100	19,00	19,00		none									1	53	53	DSCN5676
101	19,00	19,00		none					1					116	116	DSCN5676
МП3	11,00	11,00		none	1		2	2					1	38	143	DSCN9826
МП1	9,30	9,30		none	3	5	3	2		1		1	4	32	184	DSCN9825
7К	9,14	9,14		none	1		2		2				1	34	158	DSCN9828
19ЛЕ	9	9		none					1					86	86	DSCN9829
На 5 м	5	5	Partially broken	none			3		1			1	3	3	104	DSCN5659, DSCN5660
200	6,20	6,20		none			2	2	1			1	3	137	137	DSCN9831

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
П31	11,70	11,70		none		2										DSCN9834
ЛУ1	15,10	15,10		none												DSCN9835
ЛОТО	14,00	14,00		none				2		1		2	2	14	137	DSCN9827

**The photographs can be found in the folder titled "Examination point 2.3.4 „on the accompannying DVD no.2 which is an integral part of the Report.*

Translation

APPENDIX 10

Overview of registered hits on models of human figures after the explosion of 130 mm OF 482-M HE projectile placed under the angle of 62°, August 25. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model,in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
G-1	19,5	19,5							1					138	138	DSCN9836
G-2	19,3	19,3							1				1	63	90	DSCN9835
G-3	19,3	19,3									1			147	147	DSCN9834
G-4	19	19										1		33	50	DSCN9833
SLJ-1	12,28	12,28			1		1		1			3		*29*	157	DSCN9837 and DSCN9839
SL-1	6,75	6,75				1	1	1	2			3		12	143	DSCN9859 DSCN9860 DSCN9861 DSCN9862
SL-2	6,85	6,85				1	2	2				1		77	144	DSCN9864 DSCN9865 DSCN9866
SL-3	6,9	6,9				1						3		37	143	DSCN9868 DSCN9869 DSCN9870
SU-1	7,28	7,28				1	1					3	1	20	121	DSCN9872 DSCN9875
SU-2	7,5	7,5							1					95	95	DSCN9879 DSCN9881
SU-3	8,7	8,7														DSCN9882
SU-4	8,6	8,6						1				1		58	140	DSCN9883
SD-1	7,87	7,87														DSCN9884
NI-1	1,9	1,9	complete destruction													DSCN9858

G - Cafe „Гулам, **SD** – „Самоизбор-right“, **SL** – „Самоизбор- left“, **SLJ** - Shop „Сељанка“, **SU** – „Самоизбор- entry“,

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model,in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
NI-2	2,7	2,7	complete destruction													DSCN9858
NU-3	4,89	4,89	overturned	in the lower part	5	1	5	4	4			12	6	7	163	DSCN9846, DSCN9847
NU-4	5,36		split	on the side	3		1		7			7	1	5	175	DSCN9850 DSCN9851 DSCN9852
NC-1	4,66	6,10	overturned and cracked		2	3	1	1	1			1	3	8	182	DSCN9876 DSCN9877 DSCN9879
NC-2	2,26	9,10			6	7	5	12	3			5	6	8	172	DSCN9886 DSCN9887 DSCN9889 DSCN9891
NC-3	1,4	6,90	complete destruction	below the knee												DSCN9854 DSCN9856
NC-4	1,9	8,10 8,60	torn in two pieces and thrown in two directions at 8,10m and 8,60m	below the knee												DSCN9892 DSCN9893 DSCN9894
SR-1	7,2	7,2			1	2		1				2	1	36	158	DSCN9895
SR-2	13,3	13,3														DSCN9896
SR-3	13,18	13,18						1	1					87	108	DSCN9897
SR-4	13,16	13,16										1		53	53	DSCN9898
SR-5	15,94	15,94						1						88	88	DSCN9899 и DSCN900

NC - „NIK“ center, **NI** – „NIK“ SHOP, **NU** – „„NIK“ SHOP“- right, **SR** - “Samoizbor“ right

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model,in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
K-1	26,55	26,55														DSCN9909
K-2	27	27														DSCN9908
K-3	27,42	27,42														DSCN9907
K-4	27,76	27,76														DSCN9906
K-5	28,27	28,27														DSCN9905
K-6	28,65	28,65														DSCN9904
SKI-1	13	13														DSCN9901
SC-1	15,2	15,2														DSCN9903
SKII-1	17,24	17,24														DSCN9903
LU-1	8,31	8,31	thrown and turned					1			1	4	1	50	145	DSCN9922 DSCN9923
LU-2	8,36	8,36			1				3			5		7	158	DSCN9924 DSCN9925
LU-3	9,14	9,14												10	152	DSCN9928 DSCN9929
A-1	9,2	9,2			1	3	6	2				3	1	14	156	DSCN9930 DSCN9932
A-2	8,74	8,74			2	1	1	3	3		2	5	3	39	170	DSCN9931 DSCN9932
A-3	12,7	12,7				1			1					102	140	DSCN9934 DSCN9935
LU-1	14,6	14,6				1						1		74	180	DSCN9936 DSCN9937

A – Auto „Fiat 125“, **K** - Coffe shop “coffe shop “Leonardo“, **LU** – “Leonardo -angle“, **SKI** – „„Samoizbor“ the popcorn machine closer to “NIK“ **SKII** – „„Samoizbor“ the popcorn machine closer to “Kapija“ coffee shop, **SR** - The central part of the square

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model,in the area of:								The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
LU-2	16,94	16,94										2	1	15	76	DSCN9938 DSCN9939 DSCN9940
B-1	9,37	9,37											1	15	15	DSCN9918 DSCN9919
B-2	10,24	10,24				1			1					107	131	DSCN9917 DSCN9918
AP	13,28	13,28										1	1	63	69	DSCN9916
DK-1	15,91	15,91														DSCN9915
LT-1	19,25	19,25														DSCN9910 DSCN9914
LT-2	20	20														DSCN9910 DSCN9913
LT-3	21,1	21,1														DSCN9910 DSCN9912
LT-4	21,63	21,63														DSCN9910 DSCN9911
KO-1	on the “Golf 1“ from the back	1,2 m behind „Голф 1“										2	2	15	66	DSCN9943 DSCN9947 DSCN9948
KO-2	on the “Golf 1“ from the back	1,2 m „Голф 1“										10	10	6	72	DSCN9945 DSCN9946
KO-3	leant on the “Golf 1“ sideways	leant on the “Golf 1“ sideways										1		20	20	

AP – „Pašić Law Office“, **B** - Clothes shop at “Leonardo“ coffee shop,, **DK** - „Kapija“ store, **KO-** The person eating popcorn leant on the “Golf 1“ **LT** - „BiH Lottery“, **LU** - Coffe shop “Leonardo“-entrance,

* *The photographs can be found in the folder titled “Examination point 2.4.1„on the accompannying DVD no.3 which is an integral part of the Report.*

TOC–12–1385
INTERNAL

Translation

APPENDIX 11

Overview of registered hits on models of human figures after the explosion of 130 mm OF 482-M HE projectile placed under the angle of 62°, September 04. 2014.

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
G-1	16,20	16,20		none												DSCN9861
G-2	18,60	18,60		none			2	2				3		21	117	DSCN9862
SE-1	12,80	12,80		none				2		1				100	140	DSCN9731
N-1	2,20		Complete destruction													DSCN9868
N-2	2,48		Complete destruction	sprayed												DSCN9867
N-3	5,18	6,40	overturned	sprayed	10	2	2	5	2			10	4	11	176	DSCN9866
N-4	6,26	7,10	overturned	sprayed	2		2	2	1	1		1	4	19	167	DSCN9864
NC-1	2,8	6,0	destroyed and split in two pieces													DSCN9876 and DSCN9877

G- Coffe shop “Gulam“, N- „NIK“ shop, NC- „NIK“ centre, SE- „Seljanka“ shop

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
NC-2	2,6	6,0	Destroyed													DSCN9877
NC-3	3,2	6,0	Destroyed													DSCN9878
NC-4	5,00	7,10	overturned		2	11	19	7	10			12	14	11	178	DSCN9875
SL-1	9,30	9,30		sprayed								2		51	61	DSCN9869
SL-2	7,65	7,65		sprayed		2		1				2	2	8	140	DSCN9871
SU-1	8,15	8,15		sprayed		3		1				3	2	12	128	DSCN9872
SU-2	8,05	8,05				1			8	1	1			131	143	DSCN9874
SD-1	9,00	9,00			1	1								84	132	DSCN9880
SKI-1	10,30	10,30		none				1						91	91	DSCN9881
SC-1	14,20	14,20		none												DSCN9882
SKII-1	19,15	19,15		none												DSCN9883

NC- „NIK“ centre, SC- „Samoizbor“ middle, SD- „Samoizbor“ right, SKI- Popcorn machine 1, SKII- Popcorn machine 2, SL- „Samoizbor“ left, SU- „Samoizbor“ entrance

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
K-1	28,00	28,00		none												DSCN9889
K-2	27,00	27,00		none												DSCN9888
K-3	26,30	26,30		none								1		77	77	DSCN9887
LT-1	20,60	20,60		none												DSCN9890
LT-2	19,60	19,60		none												DSCN9892
LT-3	15,00	15,00		none			1						1	46	81	DSCN9895
LT-4	17,70	17,70		none			1						1	79	94	DSCN9893
DK-1	16,20	16,20		none									1	42	42	DSCN9894

DK- „Kapija“ store, K- coffe shop “Kapija“, LT- „BiH Lottery“

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
AP-1	11,50	11,50		none	1				2					96	165	DSCN9898
B-1	9,10	9,10		none	2		2	1	1	2		3	1	31	164	DSCN9900
B-2	8,10	8,10		none	1	1	4	4				3	2	27	189	DSCN9901
A-1	9,50	9,50	overturned	none	2	3	2		2	1		4	4	10	173	DSCN9902
A-2	10,20	10,20	overturned	none	2	4	4	6	3			7	5	19	166	DSCN9904
LE-1	14,70	14,70			1				1				2	42	167	DSCN9905
LE-2	14,40	14,40	overturned													DSCN9906
LE-3	14,30	14,30			4	2	5	5	2			3	2	15	179	DSCN9907
OB-1	13,30	13,30														DSCN9922
OB-2	13,40	13,40														DSCN9921
Golf 1	4,0		overturned									3	3	18	31	DSCN9925
Golf 2	4,0		overturned													DSCN9924

A- Auto AP- Pašić Law Office, B – boutique DK- „Kapija“ store, LE - coffe shop “Leonardo“, OB- „Obuća Beograd“ store

TOC–12–1385
INTERNAL

Translation

Model marking	Distance from the „Center of the explosion“ before the explosion	Distance from the „Center of the explosion“ after the explosion	The condition of the model after the explosion	Traces of soot	The place and number of hits on the model, in the area of:									The height of the lowest hit	The height of the highest hit	Photos
	[m]	[m]			head	chest	stomach	left arm	right arm	right shoulder	left shoulder	right leg	left leg	[cm]	[cm]	
Golf 3	1,70															DSCN9932
Lutka 1	23,48	20,54		none												
Lutka 2	20,54	20,54		none												
Lutka 3	21,78	21,78		none												
Lutka 4	31,00	31,00		none												
Lutka 5	32,10	32,10		none												

**The photographs can be found in the folder titled "Examination point2.4.2„on the accompannying DVD no.4 which is an integral part of the Report.*

Translation

APPENDIX 12

Overview of registered hits on models of human figures after the explosion of 2,4 kg of plastic explosive PEP 500, August 15. 2014.

Model marking	The distance from the centre of explosion	The distance from the centre of explosion after the explosion	Changes to a model	Number of hits	Photos
	[m]	[m]			
0	7,5	7,5	overturned	48 (throughout the body)	DSCN9957
0	8,1	8,1	overturned	24 (throughout the body)	DSCN9958
1	2	3,1			
2	3,4	3,4			
3	7,2	8,9	overturned	1 (in the neck area)	DSCN9963
4	7,3	7,3	overturned		
5	13,8	13,8		4 to the shoulder height	DSCN9965
6	13,4	13,4			
7	20	20		2 stomach and in the leg	DSCN9966
8	20,4	20,4			
9	26,5	26,5			
10	26,6	26,6		2 stomach and in the hurdle	DSCN9967
11	31,6	31,6		1 stomach	DSCN9968
12	35,9	35,9	overturned	2 (cube hit in the occiput and left leg)	DSCN9970
13	37,95	37,95			
14	42,5	42,5		1 (in the neck area)	DSCN9972
15	45,8	45,8			DSCN9971
16	45,8	45,8			

**The photographs can be found in the folder titled "Examination point 2.5.1 „on the accompannying DVD no.6 which is an integral part of the Report.*

Translation

APPENDIX 13

Overview of registered hits on models of human figures after the explosion of 2.5 kg of plastic explosive PEP 500.

Model marking	The distance from the centre of explosion	The distance from the centre of explosion after the explosion	Changes to a model	Number of hits	Photos
	[m]	[m]			
1	3,7	4,2	overturned		PICT0145
1Б	5,25	6	overturned		PICT0143
2Б	5,25	6,2			PICT0144
2	3,8	3,8	overturned		PICT0146
3	7,6	7,6			PICT0149
4А	6,6	6,6			PICT0147
4Б	8,1	8,1	overturned		PICT0148
5	14,4	14,4			PICT0150
6	14,8	14,8			PICT0151
7	20,9	20,9			PICT0153
8	21	21			PICT0152
9	26	26			
10	32,5	32,5			

**The photographs can be found in the folder titled "Examination point 2.6.2 „on the accompannying DVD no.6 which is an integral part of the Report.*

APPENDIX 14

Photos and videos recorded on eight DVDs.