



**REGULATION**  
**of the contest «Masters of armored vehicles»**

## 1. General Provisions

Competition "Masters of armored vehicles" - a competition (competition) held among the drivers (crews) of units of autotechnical and tank technical support (hereinafter referred to as the Competition).

The objectives of the Competition are:

enhancing the prestige of military service;  
increasing the level of field training of the participants of the Competition;  
demonstration of combat capabilities (tactical and technical characteristics) of modern models of military automobile and armored vehicles (hereinafter VAT and BTT).

The official symbol of the Competition is the emblem.

The official languages of the Competition are Russian and English.

### 1.1 Composition of teams of countries participating in the Competition

Composition of the team - participants of the Competition:

senior team - participants of the Competition (representative of the participant of the Competition, organizing interaction with the senior judge of the Competition and the judging commission of the Competition) - 1 person;

team captain - 1 person;

Competitors (driver, crew, crew):

driver of a car of category "B" - 1 serviceman;

driver of a car of category "C" - 2 servicemen;

the crew of the vehicle - truck tractor - 2 military personnel, of which:

driver of a car of category "E" - 1 serviceman;

rigger - 1 serviceman;

the crew of the MTO-UB1 workshop - 3 servicemen, of which the squad leader - 1 person, the foreman - 1 person, the electrician driver - 1 person;

spare - 6 people;

coaching group (technical support group, support personnel, management group, engineering and technical staff) - 4 people.

**Total:** the team consists of no more than 22 people.

The replacement of the main composition of the team is made only in cases of physical impossibility of further participation of any crew member in the manner prescribed by these Regulations and by decision of the Chief Judge of the Competition.

It is not allowed as part of teams during the preparation and during the Contest the participation of personnel in excess of the established number.

### 1.2 Nomenclature of weapons, military equipment and equipment to participate in the Competition

Armament and equipment of the personnel of the team.

Small arms - 5 units. (5.45 mm AK-74 assault rifle or a sample similar in tactical and technical characteristics), 3 units. (9 mm Makarov PM pistol or a sample

similar in tactical and technical characteristics). Sighting device - a mechanical (not optical, not laser) sight that corresponds to the technical description of this weapon model.

Military personnel perform competition tasks in accordance with the conditions of each stage of the Competition. When performing all exercises of the Competition, it is necessary to provide for the presence of a set of military field (special) uniforms (headgear, trousers and jacket, high-top boots) for each participant. In addition, when performing shooting exercises, the Competitor must use individual body armor (body armor with chest and back protection weighing at least 7 kg, armored helmet (steel helmet or similar weighing at least 0.7 kg).

In the event of deviations from the specified characteristics of uniforms, equipment, weapons, by the decision of the judging commission, the contestants may be given appropriate samples of the Russian army or the established coefficients may be applied. The odds are determined by an open vote of the members of the panel of judges and are adopted by a majority vote.

Before performing the exercises on the start line, the judge checks the completeness of the uniform of each participant and gives the necessary instructions for eliminating the shortcomings, the time for eliminating the shortcomings is no more than two minutes (if this time limit is exceeded, the participant is charged once a time penalty of 1 minute when performing this exercise. ). In case of loss of the elements of the uniform due to the fault of the participant of the Competition (intentionally) during the exercise, he will be charged a penalty time (for each element) - 30 s. (in this exercise).

Military equipment.

To complete the stages of the Competition, serially produced samples of automobile and armored vehicles, adopted by the armed forces of the participating countries, are involved in the number (per team):

"Passenger car" with a 4x4 wheel arrangement manufactured by LLC Ulyanovsk Automobile Plant - 1 unit. (for foreign countries a similar car with a 4x4 wheel arrangement);

"Truck" with a 4x4 wheel arrangement manufactured by KAMAZ PTC - 1 unit. (for foreign countries, a similar car with a 4x4 wheel arrangement);

"Truck" with a 6x6 wheel arrangement manufactured by KAMAZ PTC - 1 unit. (for foreign countries a similar vehicle with a 6x6 wheel arrangement);

Semi-trailer truck with 6x6 wheel arrangement manufactured by KAMAZ PTC - 1 unit. (for foreign countries of a similar vehicle with a 6x6 wheel arrangement);

"Maintenance workshop MTO-UB1" - 1 unit. with a wheel arrangement 6x6 (or a sample similar in purpose and tactical and technical characteristics).

It is forbidden to make constructive changes (additions), install (replace) parts, assemblies and assembly units, replace software that is not specified in the technical description of the submitted sample of small arms and military equipment, in the process of preparing and holding the competition.

Armament and military equipment, mobile means of maintenance, repair and evacuation of foreign states must comply with the technical characteristics of similar

models of the RF Armed Forces.

It is prohibited to use technical means of assistance when performing special work, overcoming obstacles and moving along the route, such as video cameras, parking radars ("parktronics") and GPS navigators, etc., as well as other additional equipment and devices not included in completeness of the sample.

## **2. Leading the preparation and conduct of the Competition**

General management of the preparation and conduct of the Competition is carried out by the head of the Main Armored Directorate of the Ministry of Defense of the Russian Federation (hereinafter referred to as the GABTU of the Ministry of Defense of the Russian Federation).

Direct management of the preparation and conduct of the Competition is assigned to the GABTU of the Ministry of Defense of the Russian Federation.

For the direct management of the comprehensive support of the Competition, the administration of the Competition at the venue is appointed.

The venue of the Competition is 1437 training center (for training junior specialists of the armored service, Ostrogozhsk, Voronezh Region).

The direct preparation of the facilities of the training and material base, barracks - housing stock, park facilities and places of maintenance and storage of weapons and military equipment, maintenance of weapons and military equipment in good condition, the organization of accommodation, transportation and meals for the participants of the competition is assigned to the head of the 1437 training center.

Comprehensive support of the Competition is carried out by the GABTU of the Ministry of Defense of the Russian Federation together with the Western Military District.

## **3. Procedure for the Contest**

The Competition is held in accordance with the Competition Program defined by these Regulations.

The competition opens and closes with a solemn ceremony. All teams of the countries participating in the Competition take part in the opening and closing ceremonies.

Teams of the states participating in the Games are allowed to participate in the Competition, which ensured the readiness of personnel and equipment to participate in the Competition and the arrival of the team 10 days before the opening of the Games.

Upon arrival of the participants to the venue of the competition, preparatory events are held:

meeting, accommodation and registration of the teams of the states - participants of the Competition, medical examination;

clarification of the procedure and conditions for the Contest;

conducting trainings on safety requirements with crews and coaching groups (support groups) of teams;

study of sections, routes, obstacles, boundaries and stages of the Competition;  
reception by the arriving teams of weapons and military equipment, its maintenance;

submission of applications for the Competition with lists of participants (replacement of members of the Competition team is made after an additional application is submitted, while representatives of the Competition team are allocated from the replacement delegation);

practical training of teams along the routes of the Competition;

preparation of weapons and military equipment.

The draw, which determines the order of start for the teams participating in the Competition, is carried out immediately before the start of the Competition by the judging commission of the Competition in the presence of representatives of the teams of the countries participating in the Competition. In this case, the captain of each team participating in the Competition takes a token from an opaque bag (container) indicating the order of the start. The results of this draw determine the order of the start of the participants at all exercises and stages of the Competition.

The results of the draw are drawn up by a protocol, signed by the judging commission of the competition and representatives of the teams of the participating countries, approved by the senior judge of the competition.

Teams participating in the Competition may use their own samples of weapons and military equipment, similar in their characteristics to those of the Russian side.

The provision of weapons and military equipment for participation in competitions by the Russian side is carried out in agreement with the participants of the Games. In this case, the drawing of lots of equipment is carried out in the order previously indicated.

Preparation for the competition is completed at least three days before the start of the Competition.

Stages of the Competition:

Stage I - "Individual race";

Stage II - "Competition of the crews of the TTO workshops";

Stage III - "Competition of Captains";

Stage IV - "Team Relay".

During the first stage, as a rule, the opening ceremony of the competition is held, and after the fourth stage, the closing ceremony of the Competition.

#### **4. Conditions of the Contest**

Teams of states are allowed to participate in the competition:

ensured the readiness and arrival of the team within the period established by these Regulations;

ensured the compliance of weapons, military equipment and equipment used during the Competition with this Regulation;

familiarized with the safety requirements for the use of ranges, shooting and driving special vehicles. The communication of safety requirements to the personnel of the teams is drawn up in the appropriate journal.

In cases of violation of safety requirements, force majeure or force majeure that can affect the final results of the Competition, the senior judge of the Competition stops its conduct for all teams on the route of the Competition exercises, with the suspension of the countdown of the route passage until the creation of safe (objective) conditions for the further holding of the Competition.

After elimination of the reasons for stopping the Competition at the command of the Chief Judge of the Competition, the countdown of the route time by the Competition teams is resumed.

Depending on the prevailing circumstances, the senior judge of the Competition may suspend the stage of the Competition (stop the countdown) for both a particular serviceman and a unit (crew) performing the exercise.

A serviceman (crew) of the team of the state - participant of the Competition, who committed a gross violation of safety requirements (Appendix 1), which entailed personal injury, withdrawn from the Competition stage.

If the car breaks down during the exercise (the car did not finish on its own), if the exercise (tasks) of the Contest is not completed, for refusal to perform the exercises, the Contest participant is awarded "0" points, re-run is not allowed.

The arising malfunctions of weapons and military equipment samples during the exercise are regarded as a result of the poor quality of equipment preparation for the competition, as well as violations of the rules of its operation.

Equipment malfunctions that can be eliminated (for example, wheel breakdown) are eliminated by the participant (driver or crew) on the exercise route (no more than 30 minutes) using a standard driver's tool (for using a non-standard tool, a penalty time of 2 minutes is charged), after which the exercise is resumed. The elimination time is not deducted from the participant's total exercise time. When performing exercises of the Competition, in case of unintentional loss of structural elements of weapons and military equipment samples (except for those specified in the Regulations), which do not affect the safety of their further operation, the participant is not assigned a penalty time.

If the car gets stuck and there is no possibility of self-evacuation, the participant is obliged to warn the service personnel and representatives of the judging committee of the Competition by raising his left hand up. In this case, each participant who does not overcome the obstacle on his own is charged a penalty time of 5 minutes. The time for performing evacuation work by the attendant personnel of the Competition is fixed by the judge during the exercise using a stopwatch, from the moment the driver lifts his hand until the moment he starts moving, and then is subtracted from the total time of the participant's exercise.

Safety requirements are established in accordance with this Regulation (Appendix 1).

Before the beginning of each stage, a medical examination of the participants of the Competition is carried out.

During the period of the Competition, before the release of their park, a control

inspection of weapons and military equipment is carried out, at the end of each day - their maintenance and preparation for the next day's events.

The operation of weapons and military equipment is carried out in accordance with the requirements of the operating instructions for these samples. Maintenance, repair (if necessary) and refueling of military equipment of the countries participating in the Competition are organized on the basis of the 1437 training center park by forces and means of technical support groups of the teams of the countries participating in the Competition. The exit of equipment to the parking areas (competitions) is carried out in an organized manner and in advance.

Coaching groups and groups of technical support of teams of competitions are prohibited from using the radio networks of administrations, judging commissions of competitions during the course of competitions.

Issues related to the comprehensive provision of the participants of the Competition, as well as their responsibility in terms of causing harm to the health of participants in the Competition, damage to the material and technical base of the Competition (landfill facilities, weapons and military equipment samples), as well as their compensation, are resolved by agreement with the participating States of the Competition ...

To assess the readiness of weapons and military equipment samples for participation in the Competition, to determine the compliance of the samples with the technical requirements set forth in this Regulation, a technical commission is created. The chairman and the composition of the technical commission are determined by the senior judge of the competition. The technical commission reports the results of the examination to the senior referee and draws up in an act, which is presented to the secretary of the competition for consideration.

The work of the commission is carried out in the park before leaving and in the parking areas immediately before each stage of the competition. The Commission checks the compliance of the design of weapons and military equipment with the requirements of these Regulations, regulatory and technical documentation and their completeness (including completeness with equipment, spare tools and accessories).

In the event that deviations from the requirements of regulatory and technical documentation (operational documentation) are detected in the design, or the completeness of AME samples is violated, the commission has the right to remove them from participation in the competition until the identified deficiencies are eliminated. Time to eliminate deficiencies - no more than 30 minutes (in case of exceeding this time indicator, the participant is charged a penalty time of 5 minutes, which is summed up by the time of the upcoming exercise (stage)).

Four stages of the Competition are carried out sequentially.

The final IV stage "Team Relay", determines the state - the winner of the Competition in accordance with these Regulations.

Competitions are held during daylight hours, in strict accordance with the conditions of each competition at the stages of the Competition.

## 5. Obligations of the participants of the Competition

**Competitors** are obliged to:

know and comply with (fulfill) the requirements of the Competition Regulations;

arrive at the Competition (stages of the Competition) by the specified time with the specified weapons, equipment and weapons and military equipment (established by the Regulation on the Competition), have with you identity documents and other documents provided for by the Regulation on the Competition (driver's licenses of the corresponding category "B", "C ", " C to E ");

stay in the places designated for the participants of the Competition and strictly observe the schedule established for the Competition;

unquestioningly follow the instructions of the Contest Referee Commission; strictly observe safety requirements.

Participants in competitions cannot simultaneously be members of the judging commissions of competitions in which they participate.

Each team is assigned a senior Competition team.

**Senior Team Competition** answers:

for the safety of weapons of military and special equipment involved in the implementation of the stages of the Competition;

for the state of military discipline;

for compliance by the personnel of the team with the Regulations on the Competition;

for the fulfillment of safety requirements by all personnel and the fulfillment of the daily routine;

The head of the team must:

to submit by the specified deadline, as well as, if necessary or at the request of the senior judge of the Competition or his deputy, to the judging commission the documents provided for by the Regulations on the Contest, including at least two days in advance to submit an application for participation in the Competition;

to be constantly at the venue of the Competition, to leave only with the permission of the senior judge or his deputy;

inform the staff of the team about the decisions of the judging commission of the Competition, changes in the daily routine and the program of the Competition;

promptly inform the referee commission about the participants leaving the Competition due to the physical impossibility of further participation and being put up for replacement (replacement is made no more than 1 time from the replacement delegation). The fact of the physical impossibility of further participation is obligatory documented by the medical staff;

know the results achieved by the team members, summarize the performances of the participants for the day, set tasks for the next days;

be present at the meetings of the referee commission with an advisory vote and participate in the draw;

in all cases, when resolving controversial issues, exercise restraint and tact.

The head of the team is prohibited from interfering with the orders of the



judges, as well as making independent decisions on removing participants from the Competition without the permission of the judging commission, during the Competition to provide assistance to the participant not provided for by the Regulations on the Contest. In case of revealing the fact of rendering such assistance by the senior team or any person from the team participating in the Competition during the exercise by the participant of the Competition, he will be charged a penalty time of 2 minutes.

## **6. Composition, general duties of the judging commission of the Competition**

For the direct management of the all-round support of the Competition, by order of the Chief of the Main Armored Directorate of the Ministry of Defense of the Russian Federation, a competition working group (hereinafter referred to as the working group) is created at the Competition venue.

To manage the Competition, the head of the Main Armored Directorate of the Ministry of Defense of the Russian Federation shall appoint a referee commission consisting of:

- senior judge of the Competition;
- Deputy Chief Judges of the Competition;
- Secretariat of the Contest Referee Commission (secretary and assistant secretary);
- exercise (stage) judges;
- referees from the teams of the countries participating in the Competition (as agreed).

The personal composition of the Contest Referee Commission is approved by the relevant official responsible for the Contest.

The Referee Commission ensures the normal course of the competition in accordance with these Regulations, creates equal conditions for all participants and objectively evaluates their results.

**Senior Judge of the Competition** -heads the work of the judging commission of the Competition and controls:

- for compliance by the participants of the Competition with the conditions of the Regulations and the program of the Competition;
- preparation and equipment of obstacles (targets) on the routes;
- for the correctness of the performance of their duties by the personnel of the judging commission of the Competition;
- for the correctness of the conduct (execution) of the stages of the Competition.

He is obliged:

- make decisions on the application of the provisions of this Regulation during the competition and ensure their implementation by officials, officials and team members;

- to lead the work of the referee commission;

- manage the organization and conduct of the Competition in accordance with these Regulations;

- coordinate the work of the officials and officials of the Competition;
- promptly notify senior teams and captains of participating teams about all changes in the Contest;

- accept and consider protests, as well as any other applications of the Applicants, and submit protests and applications for consideration by the Contest Referee Commission;

- to suspend the stages of the Competition, if conditions arise that impede its normal conduct, as well as if there are prerequisites for violation of safety requirements;

- not to allow the teams (crews) of the participant to participate in the stages of the Competition in cases of violation of the requirements of the Regulations on the Contest;

- approve the results of the Competition, and at the end of it, report on the holding of the Competition and its results to the chief judge of the Games;

- to approve the list of participants in the Contest in accordance with the final protocol of the Contest and submit it to the Chief Referee of the Games;

- to bring the results of the Contest to the media and the public at daily briefings.

**Deputy Chief Judge** The competition is subject to the senior judge. He is obliged to follow the instructions of the senior judge of the Competition, and in the absence of the senior judge of the Competition - to fulfill his duties.

**Secretary of the Referee Commission of the Competition** is subordinate to the Chief Judge and the Deputy Chief Judge and is responsible for recording the results, keeping the minutes and documentation of the Competition. The assistant secretary is subordinate to the secretary of the Competition and assists him in the preparation and maintenance of documentation.

**Exercise judge** is subordinate to the senior judge and the deputy senior judge of the Competition and is responsible for the exact fulfillment by the participants of the Competition of safety requirements, the established procedure, as well as the conditions of the exercise being performed. Subordinate to him are all officials appointed to maintain (record the execution) of the exercise.

The exercise judge must:

- check the compliance of the elements of the exercises performed with the requirements of the guidelines and the Regulations;

- check readiness route to arrival;

- to bring ceasefire signals to all personnel of the subunits when performing firing exercises;

- direct the shooting at the site;

- in case of violation of safety requirements, immediately stop the exercise and report to the senior referee;

- check the readiness and compliance of the samples of weapons and military equipment with the established technical requirements before starting the exercises.

**The Referee Commission of the Competition shall wear an armband, with the emblem of the Competition placed on it (Appendix No. 3).**

## **7. The procedure for determining the team - the winner of the Competition, winners in nominations and their rewarding**

The following nominations are determined in the Competition:

"The best driver" is determined among drivers for certain categories: a car, a truck with a 4x4 wheel arrangement, a truck with a 6x6 wheel arrangement;

"The best crew of a truck tractor";

"Best Maintenance Workshop Crew";

"The best team captain";

"The team is the winner of the Contest" "Masters of armored vehicles".

The winner and prize-winners of the Competition are determined by the judging committee of the Competition as follows:

in the "Best Driver" nomination by - the sum of points scored based on the results of three exercises specified in the section of the Competition stage "Individual race". Points are awarded based on the number of drivers involved (for example, 5 drivers participated in the exercise "Driving on restricted passages", thus, the driver who took the first place gets 5 points, the second, third, fourth and fifth places - 4, 3, 2 and 1 point, respectively);

when performing individual exercises at the stage "Individual race", stages "Competition of TTO crews", "Competition of captains" the winner is the driver (crew) who completed the exercise (completed the route of the stage) with the least main time and the number of mistakes;

the winner of the Competition is the team that has passed the IV stage "Team Relay" with the least time and the number of mistakes.

At the end of the performance (race) of each driver (crew), the referee commission will adjust (add) the time for the recorded violations in accordance with this Regulation to the main time shown by the stopwatch.

The results of the Competition are drawn up in protocols, which are signed by the members of the judging commission and, after their approval by the senior judge of the Competition, are communicated to the teams of the states participating in the Competition. Copies of the minutes with the list of winners and prize-winners of the Competition are sent to the chief judge of the Games

Awarding of winners and prize-winners is held in a solemn atmosphere.

## **8. Procedure for submitting protests**

A protest in relation to the results recorded at the end of the stages of the Competition, as well as the actions of the judges and the judging commission of the Competition, is submitted by the senior team of the state - participant of the Competition in the form of a written appeal to the judging commission of the Competition no later than 2 hours after the end of the Competition stage before the approval of its results.

Attached to the appeal are photo and video materials recording the contested moments (actions) requiring a decision and consideration by the Contest Referee Commission, indicating the content of the disputed issue, the time and place of

recording the contested actions.

In case of filing an unjustified protest (not confirmed by photo and video materials), the participant (crew, team) of the country participating in the Competition that submitted the protest is charged a penalty time of 5 minutes (to the main execution time in terms of the exercise (stage) of the Competition).

Decisions on appeals containing a protest are made by an open vote of the Contest Referee Commission by a majority vote of the Contest Referee Commission members present at the meeting.

Taking part in the voting:

senior judge of the Competition;

Deputy Chief Judges of the Competition;

Secretariat of the Contest Referee Commission (secretary);

the judge at the exercise (stage) in respect of which the protest is filed;

judges from the teams of the states participating in the Competition.

If the number of votes "for" and "against" is equal, then the final decision is made by the senior judge of the Competition.

The protest is discussed during the conciliation meetings of the Contest Referee Commission. The decision by the judging commission of the Competition is made if at least half of its members are present at the meeting.

The decision of the judging commission of the Competition is drawn up in a protocol, approved by the senior judge of the Competition and communicated to the teams of the Competition.

Protests not signed by the senior team leader and without the attachment of photo and video materials on the disputed fact are not accepted for consideration.

## **9. Program of the Competition**

### **9.1. General requirements for the stages of the Competition**

Preparation for the competition is completed at least three days before the start of the Competition.

The program of the Contest provides for four stages:

the first stage of the Individual Race Competition;

the second stage - "Competition of the crews of the TTO workshops";

the third stage of the Competition "Competition of Captains";

the fourth stage of the Team Relay Competition.

### **9.2. Requirements for the stage "Individual race"**

During the first stage of the Individual Race Competition, drivers compete in the following categories:

car drivers;

truck drivers;

truck tractor drivers.

At the same time, car drivers perform exercises:

"Driving on restricted passages";  
 "Overcoming obstacles and obstacles";  
 "Driving on a training ground with impromptu obstacles."

Truck drivers perform exercises:

"Driving on restricted passages";  
 "Overcoming obstacles and obstacles";  
 "Overcoming water barriers".

Tractor truck drivers perform the exercise:

"Towing semi-trailers on restricted passages".

The "Individual Race" is held on the exercise areas equipped with the "Start" ("Finish") border and the corresponding exercise elements in order to determine the individual rating of the Competition participants.

The order of performing exercises at the Competition stage:

### ***Limited Lane Driving Exercise***

#### **Exercise elements:**

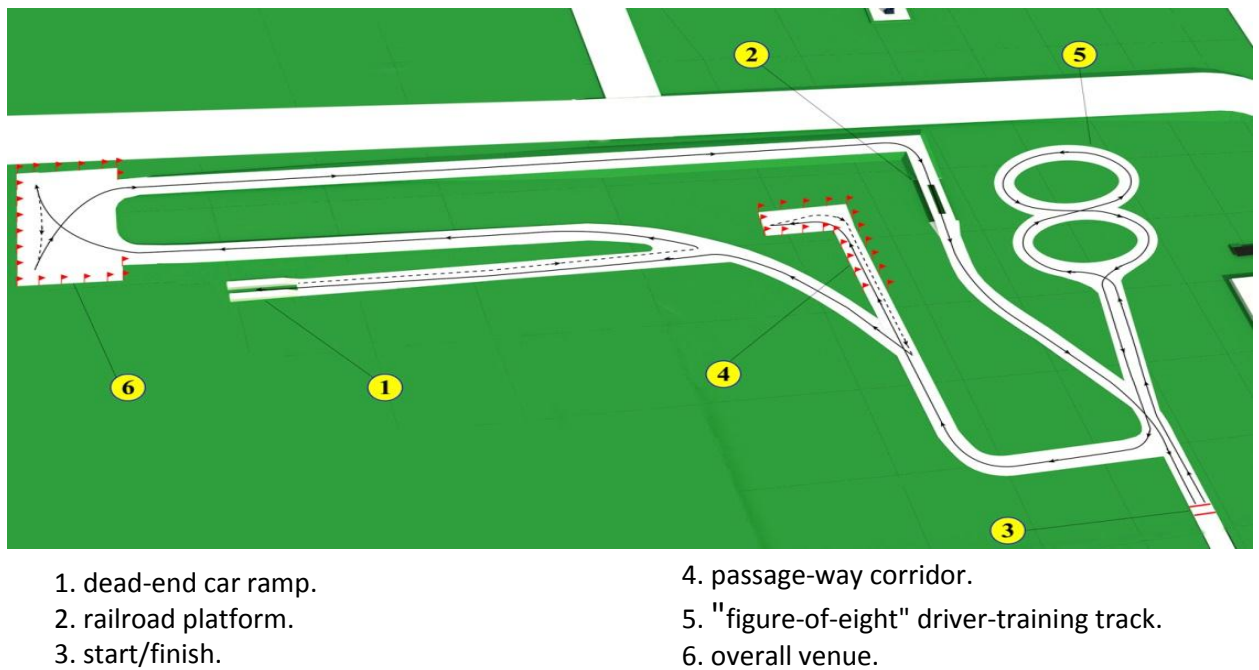
"Figure eight" overall;  
 overall corridor;  
 dead-end overpass;  
 overall yard;  
 railway platform.

**Exercise route length** - 800 m.

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

At the command of the judge on the exercise, the driver of the competition participant starts to perform the exercise (Fig. 1), in the following sequence: movement along the "figure eight" overall element with an exit to the right side, movement along the "overall corridor" element in a forward course with exit from it and turn at an angle of 90° until the front part of the machine knocks down the control rack, backward movement along the "clearance corridor" element in reverse, stop at the stop line and the "Stop" sign, drive forward to the "dead-end overpass" element and exit from it, element "yard yard", travel in front of the element "railway platform", passage of the line "Finish" and parking the car in the designated place.

The general view and dimensions of stop lines, barriers, obstacles, barriers and restricted passages specified in this Regulation are given in Appendix No. 2.



**Figure: 1** - the route of the exercise "Driving on restricted passages"

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car at the start line;
- premature start of movement from the "Start" line;
- touching (hitting, knocking down) the limiters (penalty time is charged for each touching (hitting, knocking) the limiter);
- rolling the car off the dead-end overpass and ramp when overcoming the railway platform;
- dumping a car from a railway platform, hitting a safety bar;
- the car on the overpass is not horizontal relative to the ground;
- the driver did not stop in front of the stop line (including making an incomplete stop) or crossed the projection of the front gauge of the car with a 20 cm wide marking line.

***Exercise "Overcoming obstacles and obstacles"***

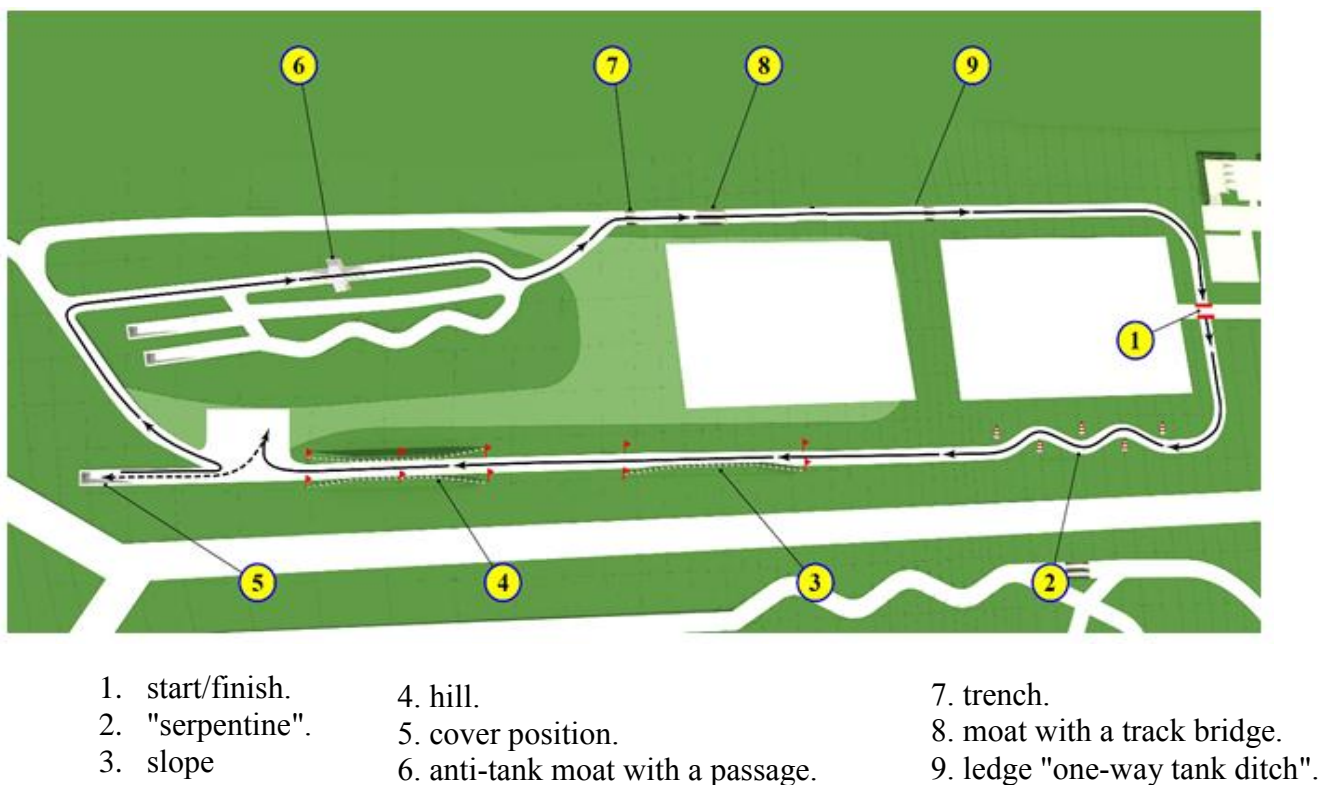
**Exercise elements:**

- "Snake";
- slope;
- Hill;
- shelter;
- anti-tank ditch with a passage;
- trench;
- a moat with a track bridge;
- ledge (counterscarp).

**Route length** - 1200 m.

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands

on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake. At the command of the judge on the exercise, the driver of the competition participant starts the exercise (Fig. 2), in the following sequence: overcoming the elements of the exercise "snake", "slope", stopping at the stop line and the sign "Stop", "hill", rear arrival going to the "shelter", overcoming an anti-tank ditch with a passage, trenches, a ditch with a track bridge, stopping at the stop line and the "Stop" sign, overcoming the "Counterscarp" ledge, passing the "Finish" line and parking the car in the designated place.



**Figure: 2** - the route of the exercise "Overcoming obstacles and obstacles"

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car at the start line;
- premature start of movement from the "Start" line;
- touching (hitting, knocking down) the limiters (penalty time is charged for each touching (hitting, knocking) the limiter);
- hitting (touching) the walls of the elements of the exercise shelter and anti-tank ditch with a passage (penalty time is charged for each hitting (touching));
- incomplete positioning of the vehicle under cover (the vehicle is not located horizontally)
- rolling back when overcoming the elements "Hill", "Anti-tank ditch with a passage";
- wheel exit from the inclined plate when overcoming the element "Kosogor";
- dumping of the car from the track bridge, "Counter-escarp" ledge and hitting

the safety bar;

movement without stopping at the "Stop line" and the "Stop" sign when overcoming the elements of the "Hill" exercise, the "Counterscarp" ledge (including an incomplete stop) or the intersection of the projection of the front dimension of the machine with a marking line 20 cm wide.

***Exercise "Driving in a training  
site with improvised obstacles "***  
**(performed only by car drivers)**

**Exercise elements:**

"Snake";  
curved clearance corridor;  
"boxing";  
section of circular obstacles.

**Exercise route length** - 350 m.

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

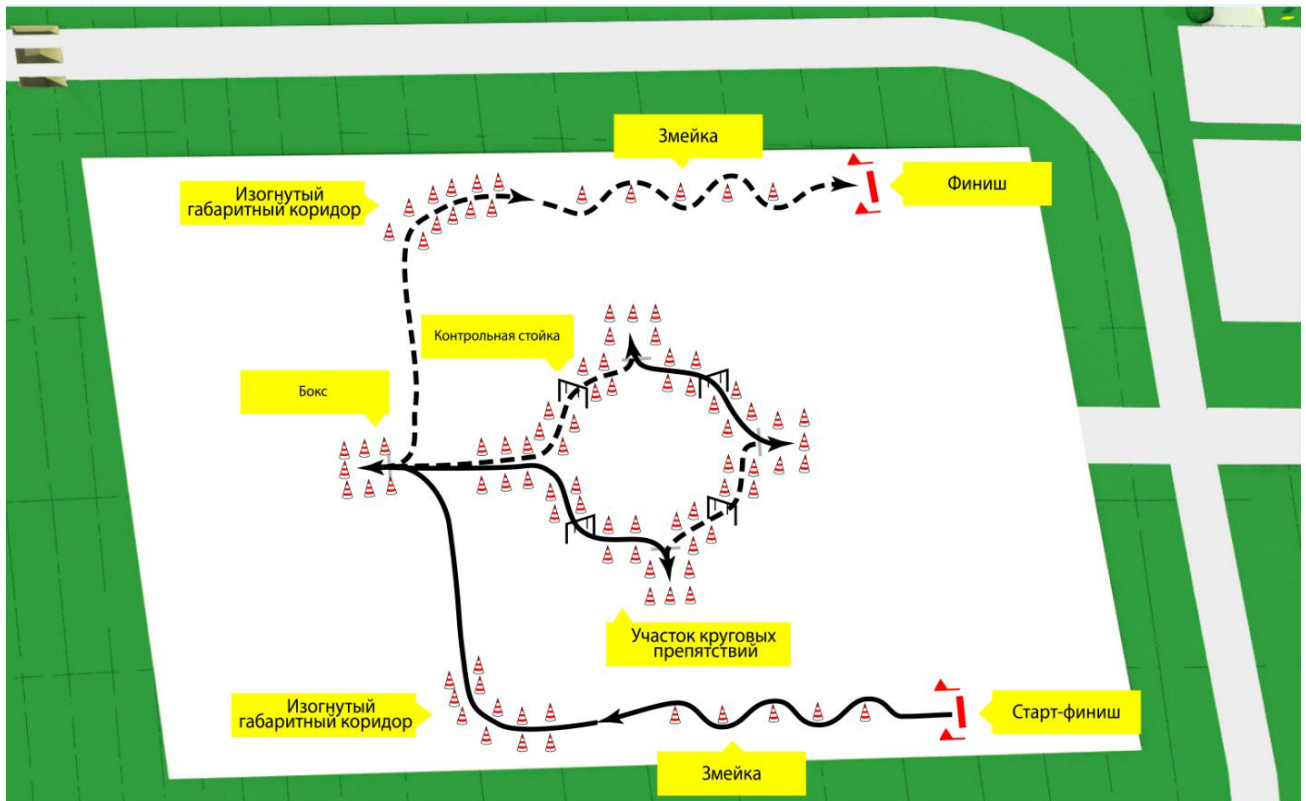
At the command of the judge on the exercise, the driver of the competition participant starts to perform the exercise (Fig. 3), in the following sequence: overcoming the "snake" element with a forward move, making a closed right turn in the overall corridor forward, entering the "box" forward, leaving "Boxing" in reverse, alternately overcoming the elements of the section of circular obstacles in front and in reverse. In addition, on the section of circular obstacles, the driver must drive under four control frames with vertical plumb lines symmetrically located diagonally without touching them. (distance between plumb lines - vehicle width + 0.5 m). After leaving the section of circular obstacles, the driver enters the "box" in a forward motion and exits the "box" in reverse, makes a closed right turn in the curved overall corridor in reverse, overcomes the "snake" element in reverse, and passes the "Finish" line in reverse. The stopwatch stops when the front clearance of the car crosses the "Finish" line. After that, the car is parked in the designated place.

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

violation of the initial position of the car at the start line;  
premature start of movement from the "Start" line;  
touching (hitting, knocking down) the limiters (cones, plumb lines) (penalty time is charged for each hitting (hitting, knocking down) the limiter);



incomplete or incorrect positioning of the car in the "box", including in the area of circular obstacles (projection of the rear clearance of the car - when driving forward, projection of the front dimension of the car - when driving in reverse) did not cross the line - the pointer);  
 stopping the car engine;  
 the vehicle has not completely crossed the Finish line.



**Figure: 3** - the route of the exercise "Driving on the training ground with improvised obstacles"

### ***Exercise "Overcoming water obstacles"*** (only performed by truck drivers)

#### **Exercise elements:**

ford 0.5 m deep and 180 m long;  
 ford 1.7 m deep and 120 m long.

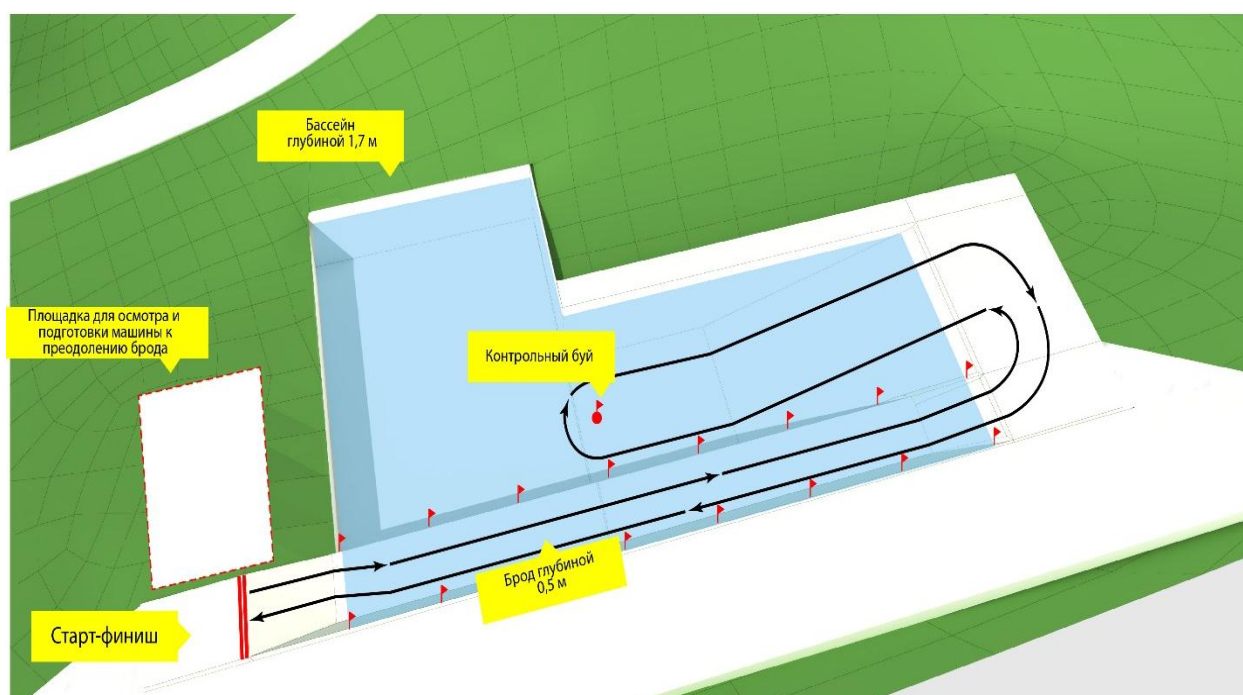
#### **Total route length** - 350 m, of which:

180 m - movement through a ford 0.5 m deep;  
 120 m - driving through a ford with a depth of 1.7 m;  
 50 m - movement by land.

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

At the command of the judge on the exercise, the driver of the competition

participant starts the exercise (Fig. 4), in the following sequence:



**Figure: 4** - the route of the exercise "Overcoming water obstacles"

the water obstacle is overcome by ford along a straight section 0.5 m deep and 90 m long, after which a turn and entry into the pool is carried out (ford 1.7 m deep). Overcoming a ford with a depth of 1.7 m is carried out with a turn behind the control buoy and return back. After that, one drives onto a straight section of the ford with a depth of 0.5 m and a length of 90 m and overcoming it, crossing the "Finish" line.

After overcoming the water obstacle, the car driver checks and prepares the car for further movement. The movement of the car to the parking lot is carried out at the command of a representative of the Contest Referee Commission.

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car at the start line;
- premature start of movement from the "Start" line;
- stopping the car when overcoming the ford;
- stopping the car engine;
- grazing the walls of the ford and buoys;
- rolling the car into the water when going ashore.

### ***Exercise "Towing semi-trailers on limited passages "***

**Exercise elements:**

"start";  
 "boxing";  
 overall corridor;  
 special wall;  
 a special platform for loading armored vehicles;  
 "finish".

**Route length** - 2000 m.

**Initial position:** the crew is in the cockpit, wearing seat belts, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in a neutral position (for cars with an automatic gearbox - the "Parking" position), a car without a semitrailer is braked by the parking brake, a semitrailer is on the "boxing" exercise element (in this case on the semi-trailer platform, the striker beams are set to the maximum width, and the front stops are in the position closest to the entrance ramps), two standard chocks are installed under the wheels.

At the command of the judge for the exercise, the driver of the competition participant starts the exercise (Fig. 5), in the following sequence:

the movement of the car to the element of the exercise "boxing" to perform the coupling of the tractor with the semitrailer, the tractor is installed so that the longitudinal axes of the tractor and the semitrailer coincide;

bring the tractor at low speed in reverse to the semitrailer so that the pivot of the semitrailer enters the fifth wheel lock until the lock is automatically closed;

by visual inspection, check the reliability of the semitrailer support plane to the fifth wheel coupling plate and check that the lock handle is locked with a latch;

raise the semitrailer supporting devices in accordance with the semitrailer operating documentation;

connect the pneumatic brake system and the electrical system of the semitrailer with the corresponding systems of the tractor;

check the functioning of the light signaling devices on the semi-trailer.

At the beginning of the movement, make sure that the coupling is reliable and that the semitrailer brakes are working properly by braking the road train.

After boarding the second crew member in the cockpit, the driver independently gets under way, enters the overall corridor and drives forward along it, moves along the circular route of the exercise, drives forward past the special wall so as to cross the control line with the front wheels, drives up to the special wall in reverse and stops at a distance of not more than 20 cm from it, re-enters the overall corridor and drives forward along it, moves along the route to the site for special loading of armored vehicles. There is a T-72B3 tank on a special site in a designated size (imitates a faulty sample, the transmission is in neutral; next to the tank on the table there is an earring for attaching the winch cable; two wheel chocks are located

under the rear of the tank's undercarriage; the tow rope is installed in the stowed position on the tank). Approaching the special site, the driver drives around it on the left, aligns the road train with the tank axis, "pulling" the road train forward, backs up to the site and brakes the tractor and semitrailer with a parking brake.

After that, the crew installs two wheel chocks under the rear wheels of the semitrailer at the rear and starts loading operations in the following order:

extend, without reaching 60 - 80 mm to the supporting surface, the rear retractable supports and lock them with the support lock, transfer the access ramps from the transport position to the working position;

turn on the winch of the tractor to dispense the cables, issue the winch cable by passing the rope thimble through the blocks of guide rollers (lead the cable out until the cable length required to install the chain hoist block for coupling is obtained);

install a chain hoist block (from the tractor's spare parts kit), for which: unscrew the nut securing the pin of the small roller; remove the pin, roller and pin bushing; put the block of the chain hoist with the fence bracket up; lead the winch cable into the stream of the large roller; fasten the rope thimble to the hook in the front of the semitrailer; put the towing rope of the tank into the cheeks of the pulley block, put the small roller in place and secure the finger with a nut; attach the tow rope of the towed tank to the front tow hooks);

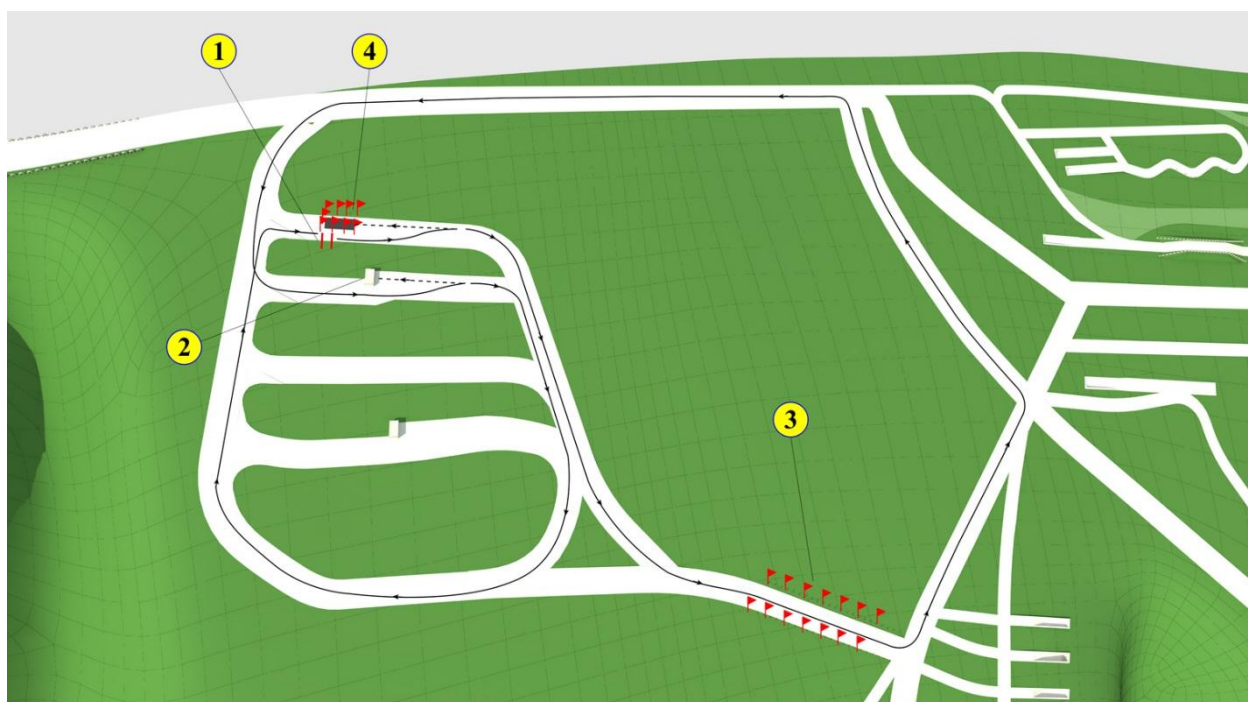
turn on the winch for pulling up (during pulling, the rigger controls the pulling, being in a safe and convenient place, the rigger is strictly prohibited when loading the tank to be on the semitrailer platform, and the driver to leave the cab while the winch is operating);

bring the transported sample to the front stops, substitute two wheel chocks under the rear of the tracks (if necessary, remove the chain hoist and continue pulling the equipment, fixing the winch cable directly to the tank's tow hooks, after which it is necessary to rearrange the wheel chocks in the same way);

to brake a submerged tank with a parking brake (performed by a rigger);

fasten the tracks to the front stops with strips (in the normal position they are fixed on the stops), install two braces diagonally between the loops of the front of the frame and the tank hooks, and two braces diagonally between the rear of the semi-trailer frame and the tank hooks;

wheel chocks are removed from under the wheels of the semi-trailer to their regular place, the crew takes places in the cab of the tractor, buckles up with seat belts and continues to move until the front bumper crosses the "finish" line, which is 20 meters ahead of the special site.



- |                      |   |
|----------------------|---|
| 1. start.            | 4. "pit".   |
| 2. special sidewall. | 5. special platform for loading armored vehicles. |
| 3. overall corridor. | 6. "finish"                                       |

**Figure: 5** - the route of the exercise "Towing semi-trailers on limited passages "

**Errors for which the crew is assigned a penalty time of 30 seconds (for each error made):**

- violation of the initial position of the car at the start line;
- premature start of movement from the "Start" line;
- touching (hitting, knocking down) the limiters, including safety blocks on a special site (penalty time is charged for each hitting (hitting, knocking down) the limiter);
- re-entry to hitch a tractor with a semitrailer, to a special wall or to a special platform;
- the car has not crossed the control line with its front wheels opposite the special wall;
- inaccurate approach to the special wall (distance more than 20 cm);
- start of movement before the second crew member gets into the cockpit and the door is closed;
- one of the crew members is not wearing a seatbelt (an error is recorded after each boarding);
- incomplete lowering or raising of the front support device of the semitrailer when coupling the car with the semitrailer;
- jumping out of the car;
- light signaling has not been tested;

- the brake system has not been tested;
- chocks are not installed in the previously indicated cases;
- the tractor and the semi-trailer are not braked by the parking brake on a special platform;
- retractable semitrailer legs are not locked by clamps;
- the equipment and tools used are not laid in their regular places (chain hoist, wheel chocks, the winch cable is not wound up to the stop).
- the tank tracks are not fixed to the front stops with strips (for each not installed strip);
- chocks are not placed under the rear of the chassis of the tank (for each stop that is not installed).

**For the sagging of the chains of diagonal guy lines (for each sagging chain) the crew is assigned a penalty time of 60 seconds.**

**Withdrawal from the competition stage is made in the following cases:**

- when overturning the tank during loading (hitting the tank tracks on the safety blocks);
- for the movement of a road train with access ramps on a semitrailer in the working (lowered) position;
- the tank after loading is not braked by the parking brake;
- the tank is not secured with diagonal braces;
- gross violation of safety requirements by crew members, resulting in injury to personnel.

### **9.3. Requirements for the stage**

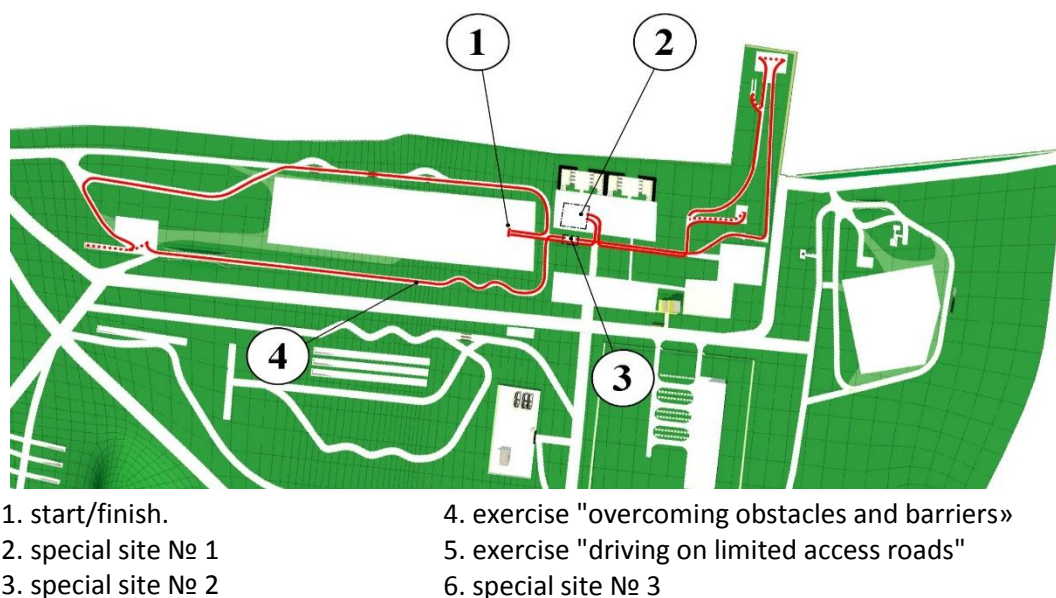
#### **"Competition of the crews of the TTO workshops"**

In carrying out this stage, the crews of the MTO-UB1 maintenance workshop (or a sample similar in purpose and tactical and technical characteristics) take part from each team. During this stage, the practical skills of drivers are assessed when driving a vehicle along a route (Fig. 6) equipped with limited obstacles and barriers, as well as the coordination of workshops crews when performing work on special sites using its technological (production) equipment and tools.

**Total route length - 2200 m.**

**Initial position:** the workshop is on the start (finish) line, carriages in front of the workshop. The personnel are at the car to the right of the front bumper at a distance of two steps, indicated by a special line. The initial state of the workshop - the engine is not running, the gearbox is in neutral position, the car is braked by the parking brake, the device for securing the spare wheel with a spare wheel is lowered at an angle of 90° from the rear vertical wall of the van body, both doors of the van body are fully open, the ladder is installed to carry out boarding - the workshop van. The execution of the task begins by all the crew at the signal of the judge in the exercise "In places", given by means of the flag signaling.

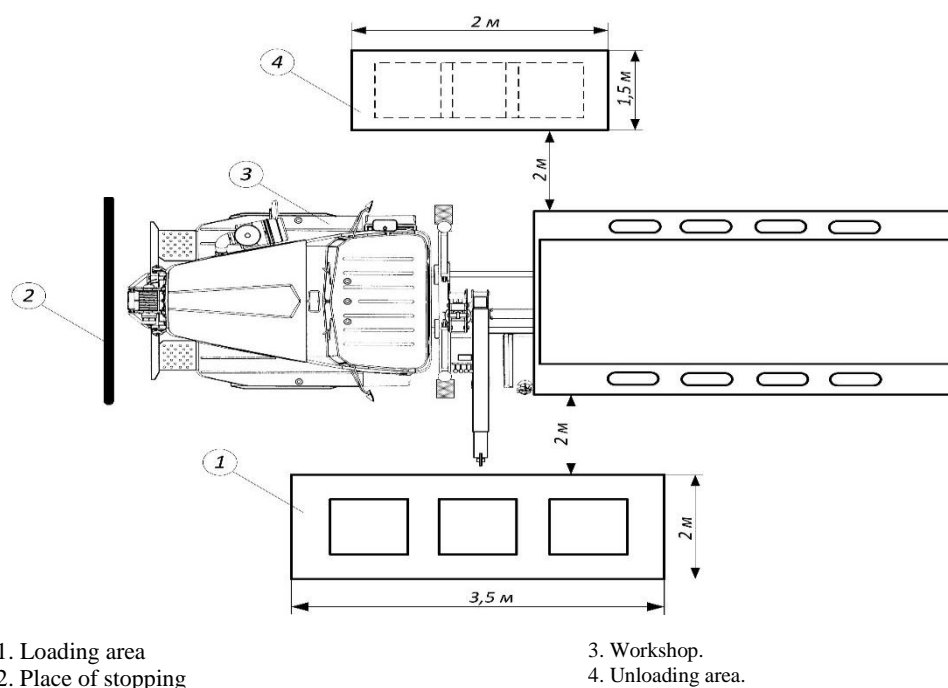




**Figure: 6** - overcome route during the stage  
"Competition of the crews of the TTO workshops"

**The order of the task:** the left door of the van body closes, the spare wheel rises and is secured in the stowed position, the right door of the van body closes, the ladder is secured in the stowed position, then the crew takes their places in the car, closes the doors, fastens with seat belts, after which the drivers give a sound signal, start the engine and start moving along the route to a special site No. 1...

Upon arrival at a special platform, the car stops at the specified place, and is braked by the parking brake, after which the crew proceeds to prepare and perform work on moving loads using a manipulator crane for accuracy (Fig. 7).



**Figure: 7** - performance of work on a special site No. 1

The work begins immediately after the vehicle is parked in the specified place and the parking brake is applied, while the crew lowers the hydraulic supports, levels the vehicle horizontally using the inclinometer, and then brings the workshop crane into working condition. At a distance of two meters to the left of the workshop, in a designated rectangular dimension measuring 2 x 3.5 m, three square weights measuring 1 x 1 m each weighing no more than 200 kg are located in one line. Crew members perform the duties of hookers (slingers). Each load is alternately hooked with the help of standard prying devices for two hooks and moved to the side opposite from the workshop, while the first two loads are installed in a line on the platform marked with a rectangular dimension of 1.5 x 2 m, located two meters to the right of the car, and the third load is placed in the second tier on two previously installed ones (three loads form a "pyramid"). When moving and placing the cargo on a platform measuring 1.5 x 2 m, the crew members are prohibited from touching it or the prying device with their hands until the cargo is lowered to the height of the crew members receiving the cargo. When loading, as well as upon its completion, the goods with any of their parts must not go beyond the designated size (at the moment of touching the supporting surface) or fall. In the event of a drop in cargo, the crew carries out loading it again until the task is completed and the moment of its completion is recorded by the judge in the exercise. When moving and placing the cargo on a platform measuring 1.5 x 2 m, the crew members are prohibited from touching it or the prying device with their hands until the cargo is lowered to the height of the crew members receiving the cargo. When loading, as well as upon its completion, the goods with any of their parts must not go beyond the designated size (at the moment of touching the supporting surface) or fall. In the event of a drop in the load, the crew carries out loading it again until the task is completed and the moment of its completion is recorded by the judge in the exercise. When moving and placing the cargo on a platform measuring 1.5 x 2 m, the crew members are prohibited from touching it or the prying device with their hands until the cargo is lowered to the height of the crew members receiving the cargo. When loading, as well as upon its completion, the goods with any of their parts must not go beyond the designated size (at the moment of touching the supporting surface) or fall. In the event of a drop in the load, the crew carries out loading it again until the task is completed and the moment of its completion is recorded by the judge in the exercise. as well as upon its completion, the weights with any of their parts must not go beyond the designated dimensions (at the moment of touching the supporting surface) or fall. In the event of a drop in the load, the crew carries out loading it again until the task is completed and the moment of its completion is recorded by the judge in the exercise. as well as upon its completion, the weights with any of their parts must not go beyond the indicated dimensions (at the moment of touching the supporting surface) or fall. In the event of a drop in the load, the crew carries out loading it again until the task is completed and the moment of its completion is recorded by the judge in the exercise.

After completing the task, the workshop crew returns the lifting equipment to the stowed position, takes regular places, closes all the doors, buckles up with seat belts, after which the driver gives a sound signal and continues along the route,



overcoming the following elements of the exercise "Driving on restricted passages": "clearance corridor "Forward movement, leaving it and turning at an angle of 90° until the front of the machine knocks down the control rack and backs up along the" clearance corridor "element in reverse, stops at the stop line and the stop sign, forward drive to the" dead-end overpass "element "And an exit from it, a U-turn on the element" overall yard ", forward passage of the element" railway platform ". Then the workshop stops at a special site No. 2 at the indicated location. The driver stops the engine, brakes the workshop with the parking brake. Further, the crew fulfills the standard for replacing the left front wheel of the workshop. The fulfillment of the standard begins on its own immediately after the machine has completely stopped at the specified place. The crew replaces the left front wheel at the MTO-UB1 workshop with a standard full-size spare wheel, which is installed in a regular place behind the body - the workshop van. Mismatch in the direction of the tread pattern of the replaced wheel is not an error. Wheel replacement is carried out using a standard hydraulic jack and keys from a single set of spare parts for the workshop. The tightening force of the nuts (bolts) must ensure the safety of movement (the nuts (bolts) must not be unscrewed by hand). The replaced wheel is installed in the original spare wheel location, behind the workshop van. The tool is placed in its original place (under the driver's seat).

At the end of the work, the crew takes places in the workshop cabin, closes the doors, buckles in the seat belts, the driver gives a sound signal, starts the engine and continues to move, overcoming the following elements of the exercise "Overcoming obstacles and obstacles": "snake", "slope", stop at stop - lines and signs "Stop", "hill", reversing into a shelter, overcoming an anti-tank ditch with a passage, trenches, a ditch with a track bridge, stopping at the stop - line and a sign "Stop", overcoming the ledge "Counterscarp". Then the driver stops the workshop at a designated place on the special site No. 3, where the crew performs work using a pneumatic jack (Fig. 8), while the work begins on its own immediately after a complete stop of the machine. The workshop is braked by the parking brake a portable table is installed, the necessary equipment is deployed. Next, the crew, using a pneumatic jack, lifts the bow of the tank (tank weight is not less than 42 tons) to a height of at least 5 cm from the upper edge of the track in the zone of the first road roller. After the judge (accountant) at the exercise recorded the fulfillment of the task, the crew puts the equipment and tools in their regular places. The crew takes places in the workshop cabin, the driver gives a sound signal and starts moving to the "Finish" line, after passing which it is set up in the designated place. After the judge (accountant) at the exercise recorded the fulfillment of the task, the crew puts the equipment and tools in their regular places. The crew takes places in the workshop cabin, the driver gives a sound signal and starts moving to the "Finish" line, after passing which it is set up in the designated place. After the judge (accountant) at the exercise recorded the fulfillment of the task, the crew puts the equipment and tools in their regular places. The crew takes places in the workshop cabin, the driver gives a sound signal and starts moving to the "Finish" line, after passing which it is set up in the designated place.



**Figure: 8** - performance of work on a special site No. 3

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car or the crew at the "Start" line;
- premature "Start" (before the command "To places");
- body doors - a van or a cab are not closed before the start of movement (an error is charged for each door that is not closed);
- the ladder is not fixed in its original place or during the movement it was lost;
- the spare wheel is not raised or is not fixed in its original place according to the operating instructions (an error is charged for each fastening element that is not properly screwed on (nut, bolt, etc.);
- the workshop is not braked by the parking brake at the stops (subject to safety requirements);
- the crew did not fasten their seat belts (an error is charged for each crew member who does not fulfill these requirements);
- crew members are not in their regular places while driving;
- the workshop did not stop in front of the stop line (including an incomplete stop) or crossed the projection of the front clearance line marking the control line (stop line) 20 cm wide in the previously indicated cases;
- the supports of the crane - manipulator are exposed with violations (including not fully extended and not fixed);
- the workshop is not aligned horizontally on the site, the tilt angle is more than 2 degrees (according to the inclinometer);
- the load is not hooked onto all the provided mounting hooks (two);
- the loads with any of their parts went beyond the designated dimensions at the moment of touching the supporting surface (for each touching outside the marking dimensions) or fell;
- crane - the manipulator is not returned to the stowed (transport) position;
- upon arrival at a special site No. 2, the engine of the workshop is not stopped or, by a projection of any size, the workshop has gone beyond the control line;
- the installed wheel, the protective casing of the tire pressure regulation system, the air supply hose are not fastened with all fastening nuts (an error is

charged for each fastening nut that is not properly tightened);  
 the equipment and tools used are not stored in their original places;  
 the sound signal is not given before each engine start;  
 touching (hitting, knocking down) the limiters (penalty time is charged for each touching (hitting, knocking) the limiter);  
 rolling the car off the dead-end overpass and ramp when overcoming the railway platform;  
 dumping a car from a railway platform, hitting a safety bar;  
 stopping the car (engine) while passing obstacles and obstacles;  
 the car on the overpass is not horizontal relative to the ground;  
 hitting (grazing) the walls of the elements of the exercise "shelter" and "anti-tank ditch with a passage");  
 incomplete positioning of the vehicle under cover (the vehicle is not located horizontally)  
 rolling back when overcoming the elements "Hill", "Anti-tank ditch with a passage";  
 dumping of the car from the track bridge, "Counter-escarp" ledge and hitting the safety bar;  
 Jumping of crew members from a height of more than 1 meter (from any body elements - van, workshop cabin), an error is charged for each jump;  
 tasks (work, crew actions) were not performed in accordance with the description of the Regulations (not sequentially, an error is charged for each violation of the sequence of operations).

**For each detour of the obstacle (except for special sites No. 1, 2, 3), finding the crew under the boom of the crane - manipulator with the load and the load itself (for each crew member), touching the load or the boom with your hands on a special site No. 1** in the case previously described in the Regulation, the crew is assigned a penalty time of 120 seconds.

**Withdrawal from the competition stage is made in the following cases:**  
 when the car rolls over on any part of the route;  
 not performing work on special sites No. 1, 2, 3 or bypassing them;  
 gross violation of safety requirements by crew members, resulting in injury to personnel.

At this stage, the winner is the crew that covered the route and performed special work with the least amount of time, including the least amount of penalty time.

#### 9.4. Requirements for the stage "Competition of captains"

The "Captains Competition" is held in cars, the drivers of the cars (team captains) overcome the established routes equipped with obstacles, barriers and limited passages. The route is laid on hard road surfaces, as well as difficult-to-pass sections of rough terrain, field, clay and other roads with a deep track, water barriers.

During this stage, the personnel perform exercises with a pistol.

**Route length** - 7.6 km.

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

At the command of the judge for the exercise, the driver of the competition participant starts the exercise (Fig. 9), in the following sequence:

performing the exercise "Driving on restricted passages", overcoming the elements of the "snake", "slope" and "hill" exercise "Overcoming obstacles and obstacles", passing the section of high-speed traffic, stopping at the stop line, passing the exercise "Driving on the terrain" on unpaved road with steep ascents, descents, ravines, areas with sand, gravel, stubble, plowing, stones, deep ruts, with a swampy area (drivers can overcome the elements of the exercise using the means of increasing cross-country ability when overcoming difficult areas, choose the most favorable direction of travel, and at the same time, before the "Stubble" element, they must completely stop the vehicle in place, without crossing the stop line);

exercise "Overcoming a water obstacle", overcoming a ford 0.5 m deep along a straight section 90 m long;

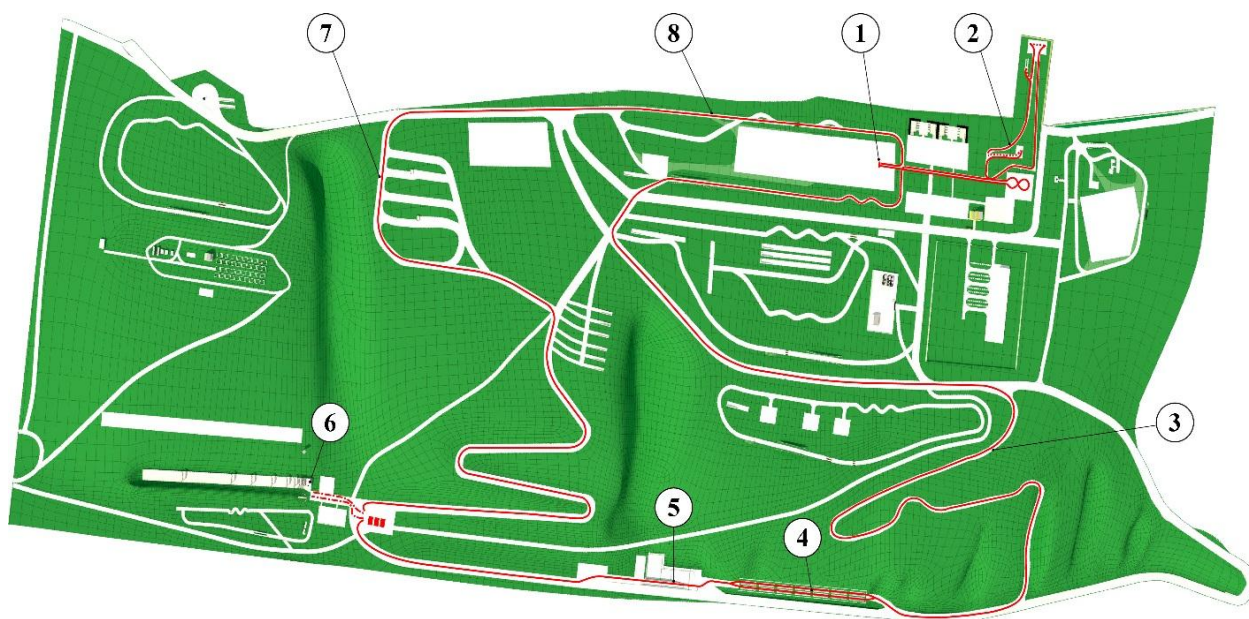
stopping at a designated place on the shooting range (the car must be braked by the parking brake, while the projection of any of its dimensions must not cross the marking line, the engine must not be stopped);

performing a pistol shooting exercise;

overcoming a mountain serpentine;

overcoming the dimensional corridor on the section of the exercise "Towing semi-trailers along limited passages", overcoming the obstacles "Trench", "Moat with a track bridge", stopping at the stop line and the stop sign, the ledge "Counterscarp" exercise "Overcoming obstacles and obstacles" and finishing.

The driver stops the car behind the Finish line at a special site. The next participant at the command of the judge begins to move along the route.



1. Start/Finish.
2. Exercise "Driving on shortcuts".
3. Dirt terrain.
4. Plot with obstacles (sand, crushed stone, stubble, ploughing, stones, deep track, with a swampy area).
5. Ford 0.5 m deep.
6. The site for performing a pistol shooting exercise.
7. The Exercise "Towing semi-trailers on shortcuts".
8. The Exercise "Overcoming obstacles and barriers".

**Figure: 9** - route of the "Competition of Captains" stage

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car at the start line;
  - premature start of movement from the "Start" line;
  - collisions with obstacles (stumps, stones, trees, etc.);
  - inability to select the engine operating mode and gear corresponding to road conditions;
  - the driver did not stop in front of the stop line, made an incomplete stop or crossed the 20 cm wide marking line with the projection of the front dimension;
  - touching (knocking down, hitting) the limiters;
  - touching the fences of road sections and elements;
  - crossing by the projection of any size of the marking lines at the stop at the shooting range (the car is not braked by the parking brake);
  - the crew did not fasten their seat belts before starting the movement (at each stop);
  - violation of the order of equipping with body armor (for example, the bulletproof vest is not fastened, an error is charged for each unfastened element);
  - driving outside the roadway and artificial obstacles.
- For deviations from the specified route of movement, bypassing the elements

of the exercise, the crew who performed it, a penalty time of 120 seconds (for each element) is charged.

When overcoming the elements of the exercises "Driving on limited passages", "Overcoming obstacles and obstacles", "Overcoming a water obstacle", "Towing semi-trailers on limited passages", the errors listed in the conditions of the "Individual race" are taken into account.

The race begins only at the command of the Chief Judge of the Competition (Exercise Judge).

Also, at the command of the senior judge of the Competition (the exercise judge), a change of participants (drivers) is carried out.

The shooting exercise for fire training "Shooting from a place at a stationary target during the day" is carried out in a specially prepared area equipped with directions for shooting, initial lines and lines for opening fire.

Participants of the "Competition of captains" stage upon arrival at the shooting area (Fig. 10), put the car in the designated place, equip themselves and, at the command of the judge, perform the pistol shooting exercise "Shooting from a spot at a stationary target during the day".

**Pistol Targets:**

chest figure with circles (target number 4) on the backboard 0.75 x 0.75 m. installed at eye level; motionless.

**Target range** - 25 m.

**Number of cartridges** - 6 (also at the firing range there are three spare cartridges in case of misfire or defective ammunition):

**Shooting position:** standing with one or two hands.

**The procedure for awarding points:**

knock out from 50 points and more - when these conditions are met, the total time of the participant's exercise is reduced by 40 seconds

knock out from 42 to 49 points - - when these conditions are met, the total time of the participant's exercise is reduced by 30 seconds;

knock out from 36 to 41 points - - when these conditions are met, the total time of the participant's exercise is reduced by 20 seconds;

if the above conditions are not met, the total exercise time is increased by 1 minute.

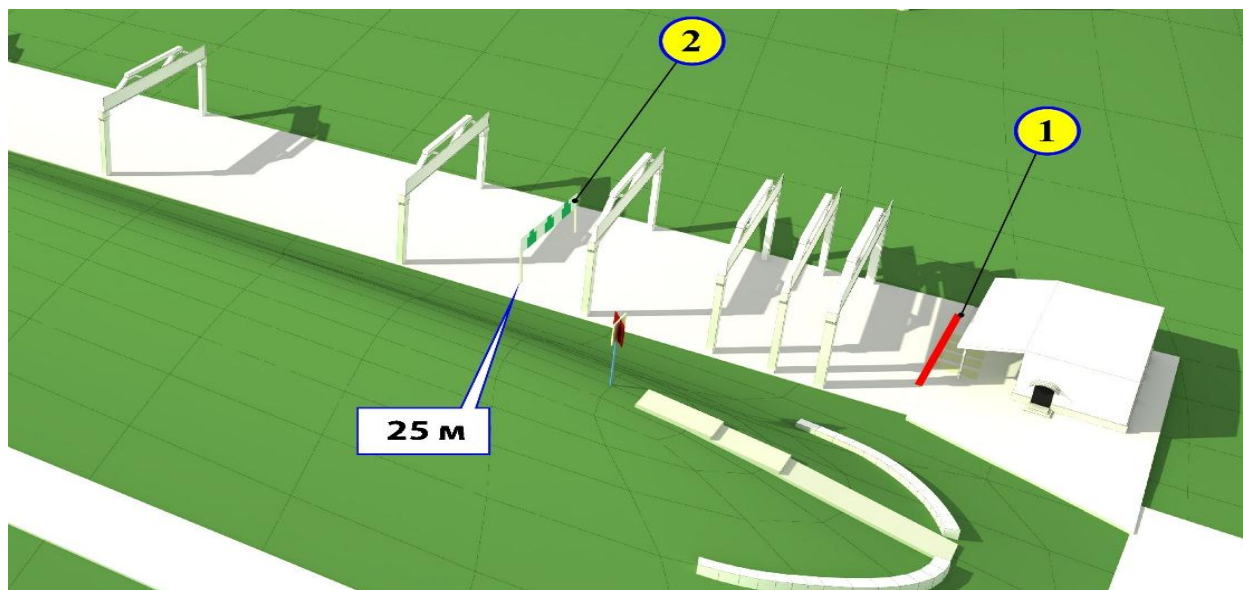
In the event of an abnormal situation (for example, "sticking" a cartridge or ammunition malfunction), the participant independently, without violating safety requirements, eliminates the malfunction (replaces the ammunition) and continues firing, while the stopwatch time does not stop.

The judge in this exercise is allowed to interfere with the participant's actions only if he violates the safety requirements (in this case, the time of the judge's intervention is recorded by a stopwatch (from the moment the judge intervenes on the exercise until the malfunction is corrected) and then is subtracted from the total time of the exercise)

The shooter, having completed the exercise, descends to the vehicle, lands in it, fastens with a seat belt and continues along the route.



The results of the shooting are determined by the stage judge and the judge from the country of the competitor who is shooting, after examining the target No. 4.



1. Firing line.
2. Pectoral figure with circles (target # 4).

**Figure: 10** - pistol shooting exercise  
"Shooting from a spot at a stationary target during the day"

Targets with the results of the shooting at the end of the races are transferred by the judge at the exercise to the Secretariat of the Competition.

### 9.5. Requirements for the stage "Team Relay"

The final IV stage of the "Team Relay" Competition involves drivers of passenger cars, truck drivers, crews of truck tractors, maintenance workshops (they compete in the team competition).

During the second stage of the Team Relay Competition, the drivers (crews) of cars overcome the established routes equipped with obstacles, barriers and limited passages. The route is laid along hard-surface roads, as well as difficult-to-pass rugged terrain, field, clay and other roads with a deep track, water barriers. Maintenance workshop crews carry out special work.

During the stage, the personnel of drivers of cars and trucks perform exercises of firing from a machine gun.

Vehicles take part in the "Team Relay" in the following order:

- a car;
- alternately two trucks (first with a 4x4 wheel arrangement, then with a 6x6 wheel arrangement);
- truck tractor;
- maintenance workshop.

The countdown starts from the moment the car starts and stops after the end of the maintenance workshop (the front clearance crosses the "Finish" line).

**Route length:**

7.6 km - for cars and trucks;

2.8 km - for a semitrailer tractor;

2200 m - for a maintenance workshop.

**9.5.1 Procedure for overcoming the route by drivers of cars and trucks.**

**Initial position:** the driver is in the cab, wearing a seat belt, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

At the command of the judge in the exercise, the drivers begin to overcome the route (Fig. 11), in the following sequence:

performing the exercise "Driving along restricted passages", overcoming the elements of the "snake", "slope" and "hill" exercise "Overcoming obstacles and obstacles", passing the section of high-speed traffic, stopping at the stop line, passing the exercise "Driving on the terrain" on the ground road with steep ascents, descents, ravines, areas with sand, gravel, stubble, plowing, stones, deep ruts, with a swampy area (drivers can overcome the elements of the exercise using the means of increasing cross-country ability when overcoming difficult areas, choose the most advantageous direction of travel, and at the same time, before the "Stubble" element, car drivers must completely stop in place, without crossing the stop line);

exercise "Overcoming a water obstacle", overcoming a ford 0.5 m deep along a straight section 90 m long;

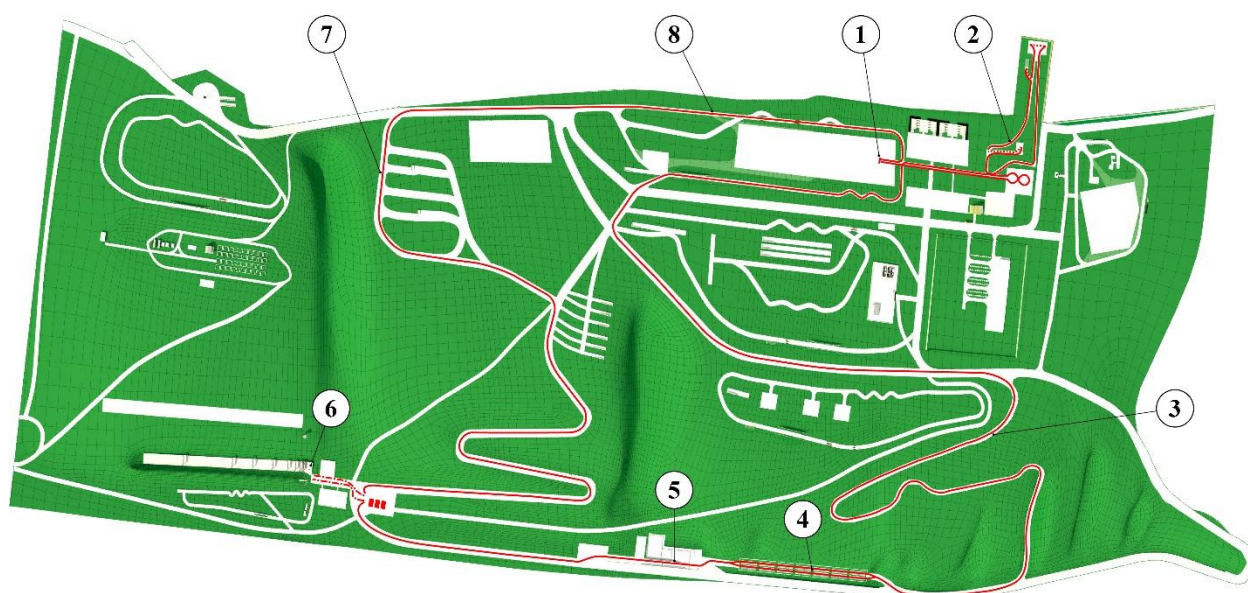
stopping at a designated place on the shooting range (the car must be braked by the parking brake, while the projection of any of its dimensions must not cross the marking line, the engine must not be stopped);

performing an exercise of shooting from a machine gun;

overcoming a mountain serpentine;

overcoming the "dimensional corridor" exercise "Towing semi-trailers on limited passages", overcoming the obstacles "Trench", "Moat with a track bridge", stopping at the stop line, overcoming the ledge "Counterscarp" exercise "Overcoming obstacles and obstacles" and finishing.





1. start/finish.
2. the exercise "Driving on shortcuts"
3. dirt site.
4. the site with obstacles (sand, crushed stone, stubble, ploughing, stones, deep track, with a swampy area).
5. ford 0.5 m deep.
6. the site for shooting from an assault rifle exercise
7. the exercise «towing semi-trailers on shortcuts»
8. the exercise «Overcoming obstacles and barriers»

**Figure: 11** - route of the "Team Relay" stage

**Mistakes for which drivers of cars and trucks are assigned a penalty time of 30 seconds (for each mistake):**

violation of the initial position of the car at the start line;  
 premature start of movement from the "Start" line;  
 collisions with obstacles (stumps, stones, trees, etc.);  
 inability to select the engine operating mode and gear corresponding to road conditions;

the driver did not stop in front of the stop line, made an incomplete stop or crossed the projection of the front dimension line with a width of 20 cm;

touching (knocking down, hitting) the limiters;

touching the fences of road sections and elements;

crossing by the projection of any size of the marking lines at the stop at the shooting range (the car is not braked by the parking brake);

the crew did not fasten their seat belts before starting the movement (at each stop);

violation of the order of equipping with body armor (for example, the bulletproof vest is not fastened, an error is charged for each unfastened element);

driving outside the roadway and artificial obstacles.

For deviations from the given route of movement, bypassing the elements of the exercise, the crew who performed it is charged a penalty time of 120 seconds;

When overcoming the elements of the exercises "Driving on limited

passages", "Overcoming obstacles and obstacles", "Overcoming a water obstacle", "Towing semi-trailers on limited passages", the errors listed in the conditions of the "Individual race" are taken into account.

### **9.5.2 The procedure for overcoming the route by the crews of truck tractors.**

**Initial position:** the crew is in the cockpit, wearing seat belts, the driver's hands on the steering wheel. The car is on the "Start" line, the engine is running, the gearbox is in a neutral position (for cars with an automatic transmission - the "Parking" position), a car without a semi-trailer is braked with a parking brake, a semi-trailer is on the "box" exercise element, under the wheels installed two standard wheel chocks.

After crossing the finish line with the front bumper of a 6x6 truck, the crew of truck tractors begins to overcome the route (Fig. 12), in the following sequence:

- making a right turn, overcoming the elements "snake", "slope", stopping at the stop line and the "Stop" sign, "hill" exercises "Overcoming obstacles and obstacles", passing a section of a dirt road with turns, driving a dimensional corridor, moving a car to to the "boxing" exercise element for hitching a tractor with a semitrailer, the tractor is installed so that the longitudinal axes of the tractor and the semitrailer coincide;

- bring the tractor at low speed in reverse to the semitrailer so that the pivot of the semitrailer enters the fifth wheel lock until the lock is automatically closed;

- by visual inspection, check the reliability of the semitrailer support plane to the fifth wheel coupling plate and check that the lock handle is locked with a latch;

- raise the semitrailer supporting devices in accordance with the semitrailer operating documentation;

- connect the pneumatic brake system and the electrical system of the semitrailer with the corresponding systems of the tractor;

- check the functioning of the light signaling devices on the semi-trailer.

At the beginning of the movement, make sure that the coupling is reliable and that the semitrailer brakes are working properly by braking the road train.

After landing the second crew member in the cockpit, the driver independently moves off, enters the overall corridor and drives forward along it, moves along the circular route of the exercise, drives forward past the special wall so as to cross the control line with the front wheels, drives up to the special wall in reverse and stops at a distance of no more than 20 cm from it, continues moving along the route, puts the semitrailer into the "box" in reverse, uncouples the semitrailer from the car.

#### **Uncoupling procedure:**

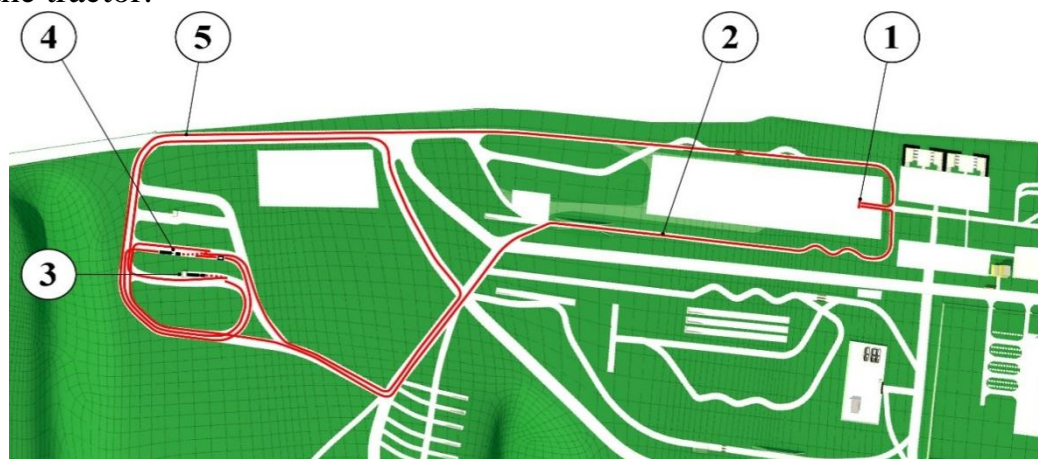
- install wheel chocks under the front wheels of the semitrailer;

- lower the semitrailer supporting device to the stop in the ground and hang out the front part of the semitrailer so as to ensure free exit of the tractor;

- disconnect the connecting hoses of the pneumatic brake drive from the connecting heads of the semitrailer;

- remove the electrical connecting cable between the tractor and the semitrailer;

open the fifth wheel lock (open the lock);  
engage the first gear of the tractor and slowly, without jerking, drive forward with the tractor.



1. start/finish
2. the exercise "Driving on shortcuts"
3. special side wall
4. start/finish (site for coupling / uncoupling)
5. the exercise "Towing of semi-trailers on shortcuts"

**Figure: 12** - route of the "Team Relay" stage (for truck tractors)

After landing the second crew member in the cockpit, the driver continues to move along the circular route of the exercise, making a right turn in front of the "Dimensional corridor" element, overcoming the "Trench" obstacles, "Moat with a track bridge", stopping at the stop line and the "Stop" sign, ledge "Counterscarp" exercise "Overcoming obstacles and obstacles" and finishing.

**Errors, for the commission of which the crew of the truck tractor is assigned a penalty time of 30 seconds (for each error made):**

- violation of the initial position of the car at the start line;
- premature start of movement from the "Start" line;
- touching (hitting, knocking down) the limiters, including safety blocks on a special site (penalty time is charged for each hitting (hitting, knocking down) the limiter);
- collisions with obstacles (stumps, trees, fences, etc.);
- re-entry to couple a tractor with a semitrailer;
- the car has not crossed the control line with its front wheels opposite the special wall;
- inaccurate approach to the special wall (distance more than 20 cm);
- start of movement before the second crew member gets into the cockpit and the door is closed;
- one of the crew members is not wearing a seatbelt (an error is recorded after each boarding);

incomplete lowering or raising of the front support device of the semitrailer when coupling (uncoupling) the vehicle with the semitrailer;  
jumping out of the car;  
light signaling has not been tested;  
the brake system has not been tested;  
chocks are not installed in the previously indicated cases;  
retractable semitrailer legs are not locked by clamps;  
deviation from the specified route of movement;  
driving outside the roadway and artificial obstacles.

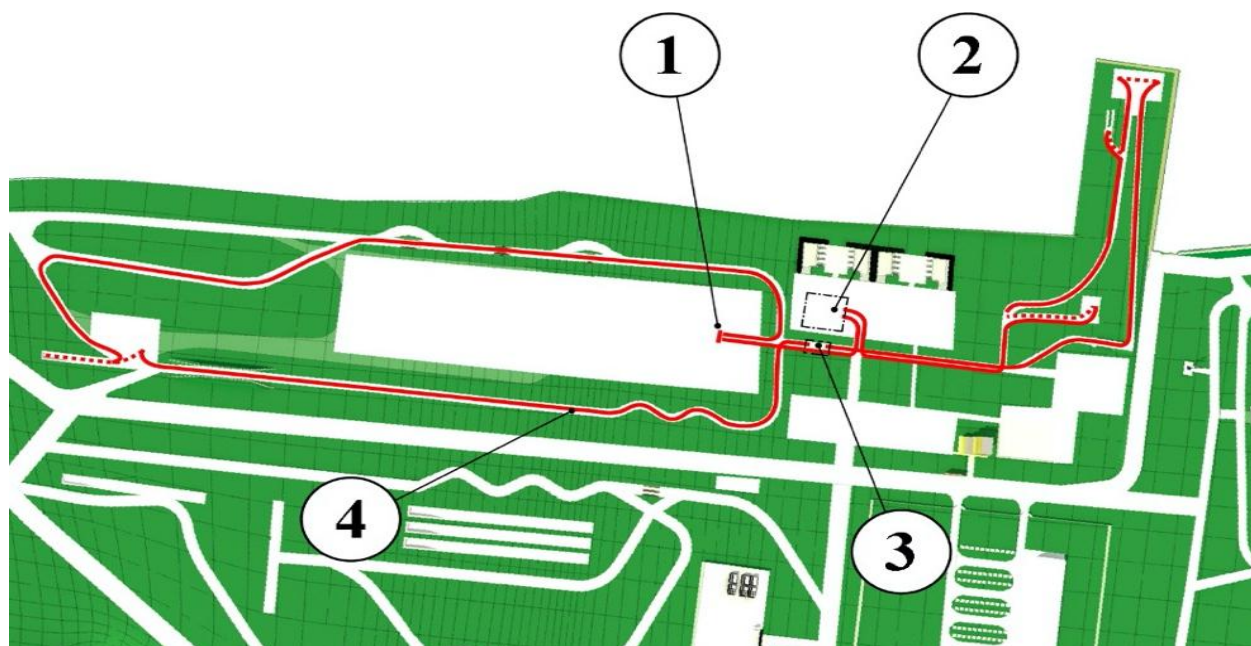
For deviating from the route, bypassing the elements of the exercise, the crew who performed it is charged a penalty time of 120 seconds (for each element).

When overcoming the elements of the exercises "Overcoming obstacles and obstacles", the errors listed in the conditions of the "Individual race" are taken into account.

### 9.5.3 Procedure for overcoming the route by the crews of maintenance workshops.

**Initial position:** the crew is in the cockpit, wearing a seat belt, all workshop equipment and tools are in their proper places, the driver's hands are on the steering wheel. The workshop is on the "Start" line, the engine is running, the gearbox is in neutral, the car is braked with the parking brake.

After crossing the finish line with the front bumper of the truck tractor (duplicated by the wave of the judge's flag), the maintenance workshop crew starts to overcome the route (Fig. 13):



- |                     |   |
|---------------------|---|
| 1. start/finish     | 4. the exercise "Overcoming obstacles and barriers" |
| 2. special site № 1 | 5. the exercise "Driving on shortcuts"              |
| 3. special site № 2 | 6. special site № 3                                 |

**Figure: 13** - route of the "Team Relay" stage  
(for crews of TTO workshops)

In this case, the movement is first carried out along the route to a special site No. 1...

Further, the sequence of the exercise is described in section 9.3. Requirements for the stage "Competition of the crews of the TTO workshops" from the moment the maintenance workshop begins to move.

**Mistakes for which the driver is assigned a penalty time of 30 seconds (for each mistake):**

- violation of the initial position of the car or the crew at the "Start" line;
- premature "Start" (before the command "To places");
- body doors - a van or a cab are not closed before the start of movement (an error is charged for each door that is not closed);



the ladder is not fixed in its original place or during the movement it was lost;  
 the spare wheel is not raised or is not fixed in its original place according to the operating instructions (an error is charged for each fastening element that is not properly screwed on (nut, bolt, etc.);

the workshop is not braked by the parking brake at the stops (subject to safety requirements);

the crew did not fasten their seat belts (an error is charged for each crew member who does not fulfill these requirements);

crew members are not in their regular places while driving;

the workshop did not stop before the stop line (including an incomplete stop) or crossed the projection of the front clearance line of the marking line of the control line (stop line) 20 cm wide in the previously indicated cases;

the supports of the crane - manipulator are exposed with violations (including not fully extended and not fixed);

the workshop is not aligned horizontally on the site, the tilt angle is more than 2 degrees (according to the inclinometer);

the load is not hooked onto all the provided mounting hooks (two);

cargoes with any of their parts have gone beyond the designated dimensions or fell;

crane - the manipulator is not returned to the stowed (transport) position;

upon arrival at a special site No. 2, the engine of the workshop is not stopped or, by a projection of any size, the workshop has gone beyond the control line;

the installed wheel, the protective casing of the tire pressure regulation system, the air supply hose are not fastened with all fastening nuts (an error is charged for each fastening nut that is not properly tightened);

the equipment and tools used are not stored in their original places;

the sound signal is not given before each engine start;

touching (hitting, knocking down) the limiters (penalty time is charged for each touching (hitting, knocking) the limiter);

rolling the car off the dead-end overpass and ramp when overcoming the railway platform;

dumping a car from a railway platform, hitting a safety bar;

stopping the car (engine) while passing obstacles and obstacles;

the car on the overpass is not horizontal relative to the ground;

hitting (grazing) the walls of the elements of the exercise "shelter" and "anti-tank ditch with a passage");

incomplete positioning of the vehicle under cover (the vehicle is not located horizontally)

rolling back when overcoming the elements "Hill", "Anti-tank ditch with a passage";

dumping of the car from the track bridge, "Counter-escarp" ledge and hitting the safety bar;

Jumping of crew members from a height of more than two meters (from any body elements - a van, a workshop cabin), an error is charged for each jump;

tasks (work, crew actions) were not performed in accordance with the description of the Regulations (not sequentially, an error is charged for each violation of the sequence of operations).

**For each detour of the obstacle (except for special sites No. 1, 2, 3), finding the crew under the boom of the crane - manipulator with the load and the load itself (for each crew member), touching the load or the boom with your hands on a special site No. 1** in the case previously described in the Regulation, the crew is assigned a penalty time of 120 seconds.

**Withdrawal from the competition stage is made in the following cases:**  
 when the car rolls over on any part of the route;  
 not performing work on special sites No. 1, 2, 3 or bypassing them;  
 gross violation of safety requirements by crew members, resulting in injury to personnel.

At this stage, the winner is the crew that covered the route and performed special work with the least amount of time, including the least amount of penalty time.

After the finish, all drivers stop vehicles behind the "Finish" line at a special site.

Teams are evaluated according to the total time spent on the route by all team members and the number of mistakes made for each exercise and participant (crew), as well as taking into account the results of the shooting exercise.

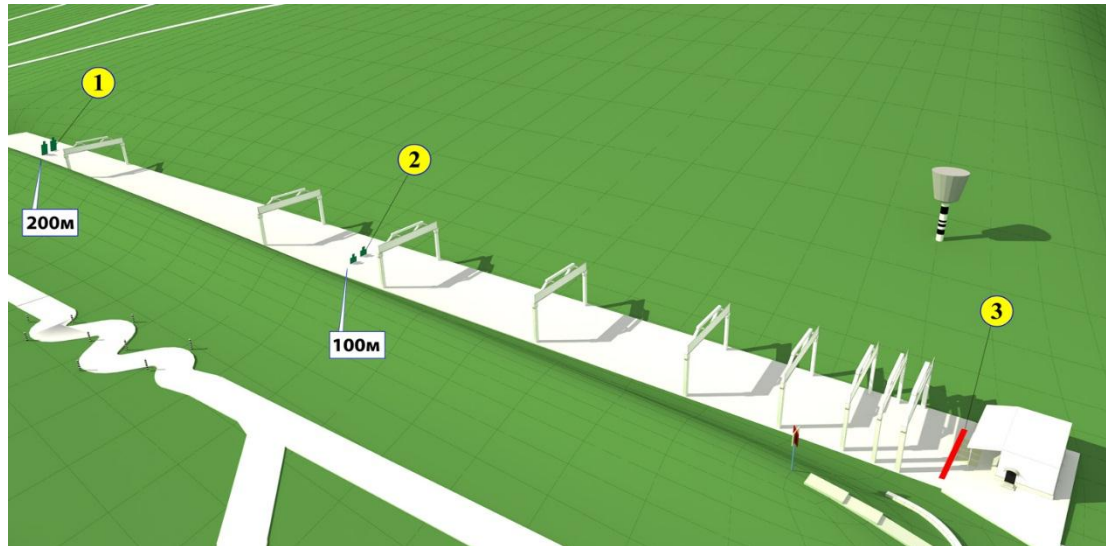
The command time is counted from the moment the car starts and stops at the moment the front bumper of the workshop crosses the "Finish" line.

#### **9.5.4 The order of the shooting routine.**

The shooting exercise for fire training "Shooting from a place at stationary and appearing targets during the day" is carried out in a specially prepared area equipped with directions for firing, starting lines and lines of opening fire.

Only drivers of cars and trucks participate in the fire training competition.

Upon arrival at the shooting area (Fig. 16), the participants in the relay, stop the car at the designated place, move to the starting line, equip themselves and, at the command of the judge, perform the shooting exercise "Shooting from a machine gun from a place at a stationary and appearing targets during the day".



1. Attacking shooter - waist piece (target number 7).
2. Pectoral figure with circles (target # 4).
3. Firing line.

**Figure: 16** - machine gun shooting exercise  
"Shooting from a spot at fixed and emerging targets during the day"

**Targets for shooting from a machine gun:**

chest figure with circles, motionless (target no. 4);

attacking shooter - a waist piece that appears for an unlimited time (target number 7).

**Target ranges:**

to the chest figure - 100 m;

to the attacking shooter - 200 m.

**Number of cartridges** - 11 (also at the firing range three spare cartridges are laid out in case of a marriage of ammunition), of which:

for shooting at a chest figure with circles - single fire - 3 cartridges;

for shooting at the attacking shooter - in bursts - 8 rounds.

**Starting position for shooting** - lying down.

**The procedure for awarding points (per shooter):**

hit target No. 7 and, when shooting at target No. 4, knock out from 25 to 30 points - when these conditions are met, the total time for performing the team's exercise is reduced by 1 minute;

hit target No. 7 and, when shooting at target No. 4, knock out from 20 to 24 points - when these conditions are met, the total time for performing the team's exercise is reduced by 50 seconds;

hit target No. 7 and, when shooting at target No. 4, knock out from 15 to 19 points - when these conditions are met, the total time for performing the team's



exercise is reduced by 40 seconds;

if the above conditions are not met, the total exercise time is increased by 1 minute.

In the event of an abnormal situation (for example, "sticking" a cartridge or ammunition malfunction), the participant independently, without violating safety requirements, eliminates the malfunction (replaces the ammunition) and continues firing, while the stopwatch time does not stop.

The judge in this exercise is allowed to interfere with the participant's actions only if he violates the safety requirements (in this case, the time of the judge's intervention is recorded by a stopwatch (from the moment the judge intervenes on the exercise until the malfunction is corrected) and then is subtracted from the total time of the exercise)

The shooter, having completed the exercise, descends to the vehicle, lands in it, fastens with a seat belt and continues along the route.

The results of the shooting are determined by the judge of the exercise and the judge from the country whose participants were shooting, after the driver of a KamAZ truck with 6x6 wheel arrangement (or a car of a similar class) completes the shooting by examining target No. 4 and reported to the judge at the "Team Relay" stage.

Targets with the results of the shooting at the end of the races are transferred by the judge at the exercise to the Secretariat of the Competition.

## ANNEXES

### Annex 1

#### **Safety requirements**

##### **General safety requirements.**

The safety of the Competition is ensured by all participants of the Competition: the referee commission, the coaching staff, the participants of the Competition and service persons who must comply with safety requirements, maintain order, discipline and take all measures to prevent accidents or road accidents.

For each exercise (task), it is necessary to provide for such territories and trajectories in order to exclude a collision of cars with each other and with surrounding objects.

Persons serving the Contest (medical staff, equipment installation assistants, etc.) must be at a safe distance and not interfere with the Contest. Their tasks, location and order of actions are determined by the senior judge of the Competition.

While driving, it is forbidden to admit unauthorized persons and vehicles to the sites and routes. For this purpose, on the way of a possible approach and approach to the places where the stages of the Competition are held, portable signs "No entry" are installed and a cordon is set up.

Dangerous places on routes should be fenced off and marked with visible signs (lanterns).

The speeds, distances and intervals between cars must fully ensure driving safety and exclude maneuvers that are not provided for by the conditions of the exercises (tasks). The paths of movement of machines should also be taken into account in order to exclude the intersection of the trajectories of their movement, except for the cases provided for by the conditions for performing the exercises.

Participants of the Competition should pay special attention to ensuring safety when performing exercises on a road surface with a low grip coefficient, as well as practicing braking, cornering and reversing techniques.

The driver of the car, who made a forced stop, must take all measures to prevent a traffic accident and immediately notify the judge at the exercise using a set signal.

When performing an exercise (task), machines that are not directly participating in the Competition and are out of order must be (be removed) in the safety zone.

All participants must be familiar with the safety requirements and be instructed. The communication of safety requirements to the personnel of the teams is drawn up in the corresponding logs.

It is prohibited:

- allow drivers who do not know the conditions for its implementation, traffic rules, safety requirements to perform the exercise (task);
- movement without the command of the stage judge (his assistant);
- driving faulty cars;

repair on the routes (places) of exercise (except for the cases described earlier);

get into the car, get out of it and be in front or behind the car with the engine running, except when it is provided for by the conditions of the exercises (stages) of the Competition;

to be for personnel while driving in the cab in an amount exceeding the norm established for this machine, as well as in the body of the car.

**Safety requirements when cars move on a railway platform exercise "Driving in restricted passages".**

The driver is obliged:

move along the side ramp, railway platform and walkways in the lowest gear, smoothly, without making sudden jerks and turns.

Pay close attention to the judge's signals and be ready to stop the car immediately.

**Safety requirements when driving through the "Counterscarp" ledge element of the exercise "Overcoming obstacles and obstacles."**

The driver needs:

stop the vehicle completely in front of the line and stop sign;

when approaching, visually align the car with respect to the "walkways" of the element (the vertical axes of the wheels should approximately coincide with the axes of the "walkways");

move along the element at a speed that ensures traffic safety, without sharp turns and braking.

**Safety requirements for overcoming water obstacles.**

When overcoming a ford, its depth should not exceed the value indicated in the technical characteristics of the machine. On the machines, it is necessary to carry out the work specified in the operating instructions.

When overcoming the ford, you must:

maintain a constant engine speed;

enter the water smoothly, in the lowest gear, do not go beyond the marked boundaries of the ford;

avoid sudden changes in engine speed, gear changes, machine stops.

**Safety requirements when carrying out lifting work.**

Lifting works must be carried out on serviceable workshop equipment. In this case, the workshops are fixed on the ground with standard equipment (retractable hydraulic supports) and are aligned with the horizon.

It is prohibited:

be under load during lifting;

use faulty lifting equipment;

admit unauthorized persons to the place of performance of the task.

### **Safety requirements for the maintenance of machines.**

Maintenance of the machines is carried out at the places (posts) equipped for this, in compliance with the following requirements:

- brake the car at the checkpoint (overpass) with the parking brake, engage a lower gear and hang a sign on the steering wheel with the inscription: "Do not start the engine - people are working!" Before leaving the post (overpass), make sure that there are no people or objects under the car that impede movement;

- when lifting the machine with a jack, hoist or crane, observe the rules for using this equipment;

- do not work under a suspended machine without special stands;

- not to carry out maintenance operations on a machine with a running engine (except for cases when it is provided for by the instruction (manual) for the operation (maintenance) of AME samples;

- do not put the tool and removed parts on the frame, footrests and other places where they can fall on the workers;

- use only serviceable tools and equipment;

- when handling leaded gasoline, brake, low-freezing and other special fluids, do not allow them to come into contact with open areas of the body and mucous membranes of the mouth, nose, eyes;

- keep the workplace clean and tidy at all times.

### **General safety requirements when driving cars.**

When driving, you must:

- strictly observe the established procedure and rules for driving cars;

- all hatches (doors) must be closed and locked, and personnel must be in their regular places, wearing seat belts;

- use only technically sound cars for driving; the spare parts available on the machines must be correctly laid and secured.

It is allowed to start the engine and start the movement of the car only on command (if it is not provided by the conditions of the Competition)

Before starting the engine, check the position of the gear lever, which should be in neutral, and sound a warning horn. The sound signal is repeated when the car starts to move in the cases specified in this Regulation.

A machine that has stopped due to technical malfunctions must immediately display a clearly visible warning triangle. The vehicle must be removed from the route as soon as possible at a distance that ensures the safety of other vehicles.

It is prohibited:

- start driving without a command (if this is not provided for by the terms of the Competition);

- move with hatches not locked (doors not closed) and without giving a warning signal;

- be on the body (box-body, cargo platform) of the vehicle while driving;

- be in the car in excess of the crew;

- use technically faulty cars for driving;

stop the car in front of the most dangerous elements of the exercises ("Hill", ledge "Counter-escarp", before entering the unpaved area, before the element "Stubble");

repair (maintain) the car on the route and on the initial line;  
continue driving in the absence of visibility.

### **Safety requirements for shooting.**

1. Safety during shooting is ensured by accurate organization of shooting, strict observance of the established rules and safety requirements, and high discipline of all servicemen.

Personnel who have not mastered the safety requirements are not allowed to shoot and service the shooting.

2. Movement on the target is allowed only on the roads and in the areas specified in this Regulation.

3. It is forbidden to enter (drive in) the areas where there are unexploded ordnance, fuses and other explosive substances. These areas should be marked with signs and signs with appropriate warning notices.

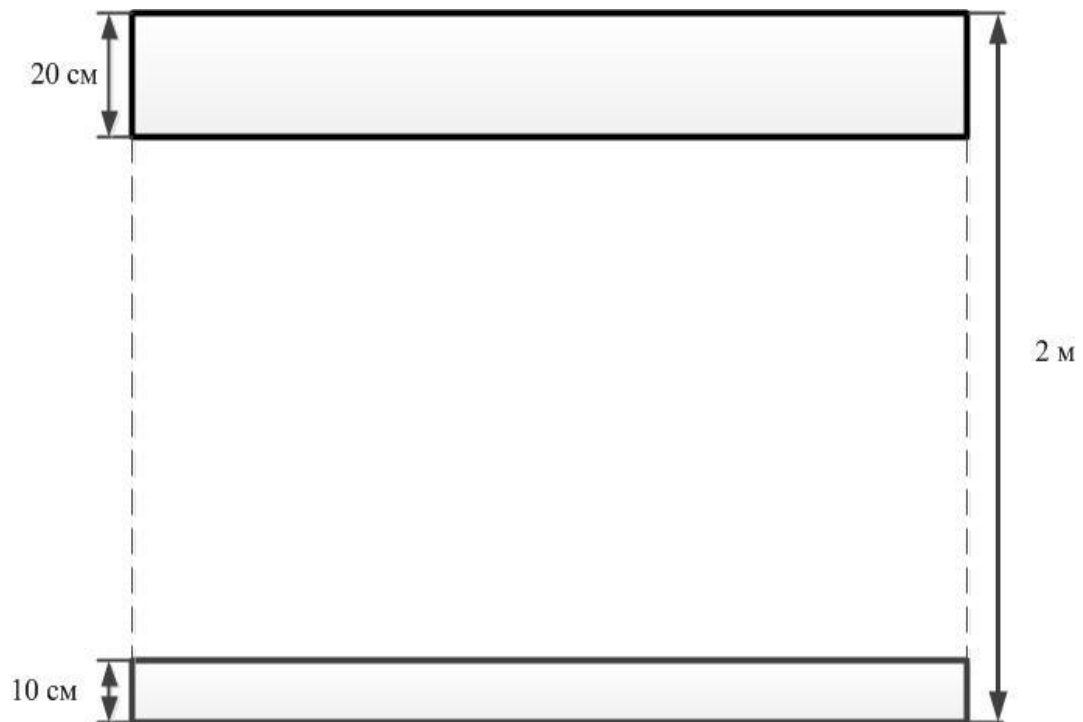
4. At the signals of a ceasefire and at the commands "Stop", "Stop fire", the shooters cease fire, stop, the weapon is unloaded and put on safety.

5. If there are delays in shooting, the shooter immediately reports this to the stage judge and raises his right or left arm up.

6. It is strictly forbidden to direct weapons towards people, vehicles, buildings and structures occupied by people.

**General view, dimensions of stop lines, limiters, obstacles, barriers and restricted passages**

**Stop - line  
(view from above)**

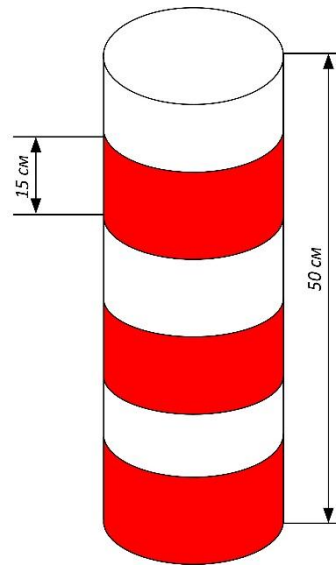


Note: the driver is obliged to stop the vehicle in front of the stop line in such a way that the projection of the front dimension of the car is in the interval between the lines 10 and 20 cm wide, but does not completely cross the line 20 cm wide.

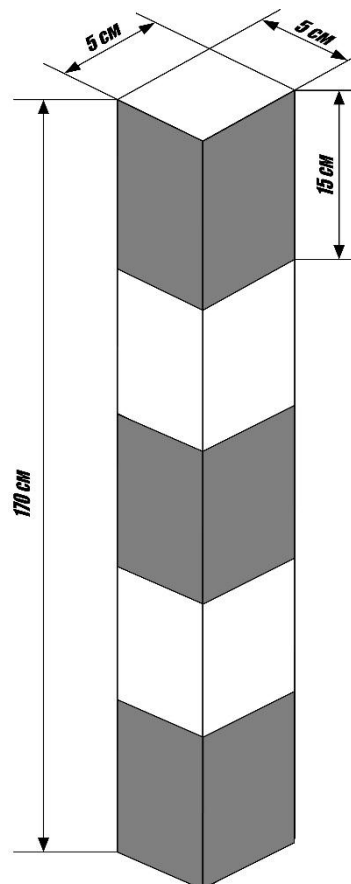
**Limiters**



Restriction cone (rubber)



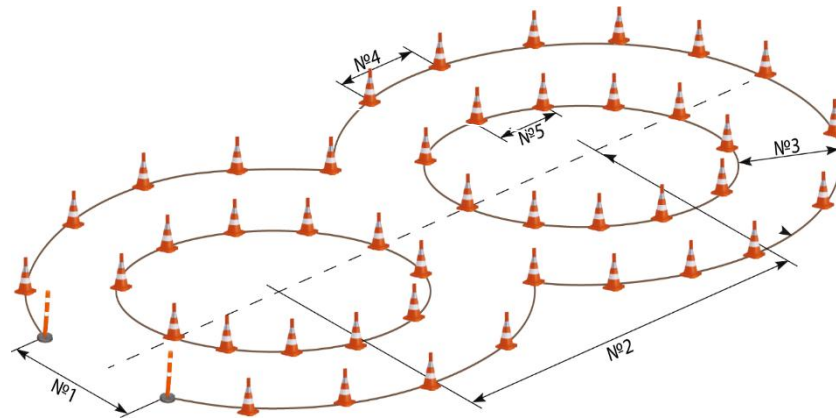
Post - limiter (metal)



Post - limiter (wooden)

## Elements of the exercise "Driving in restricted passages"

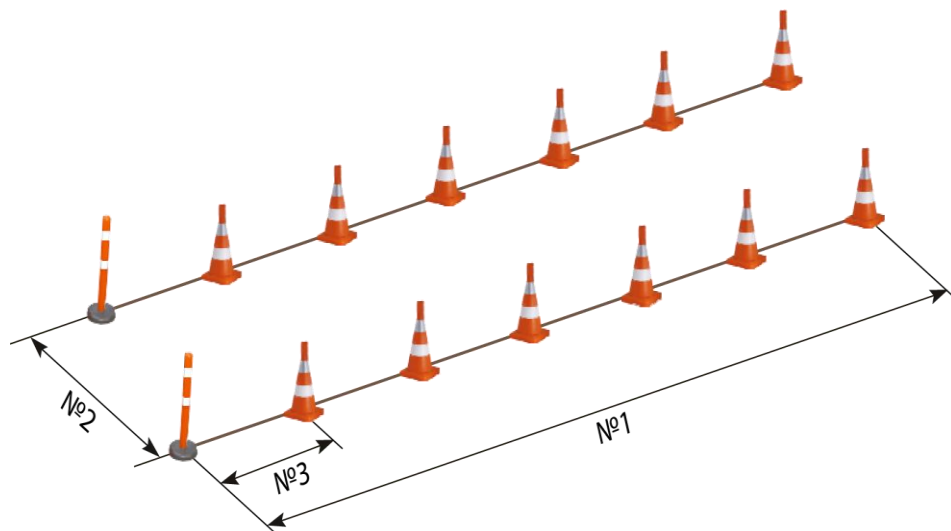
### "Eight overall"



No. p / p	Car	Passenger	Cargo
	Dimensions		
one	Entry width, m	4.22	5.1
2	Distance between the centers of circles, m	22.57	
3	Distance between limiters, m	W + 1	
4	Distance between limiters along the outer radius, m	2	
5	Distance between limiters along the inner radius, m	1.5	

Note: W - vehicle width (according to its maximum dimensions)

### "Dimensional corridor"

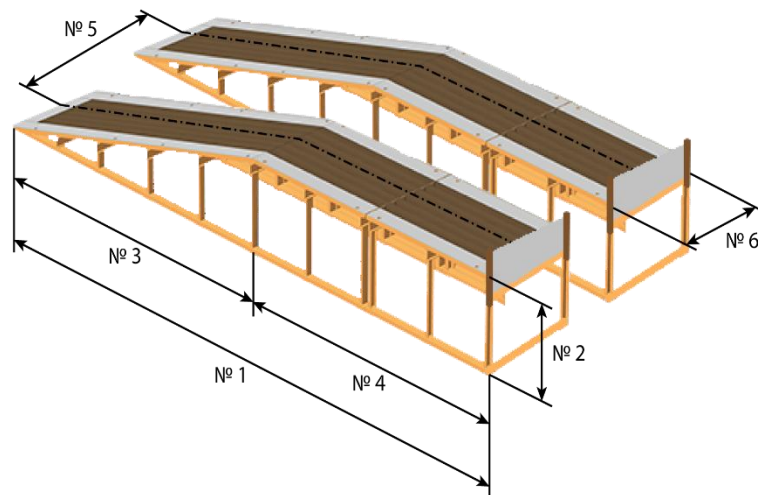


P / p No.	Car	Passenger	Cargo
	Dimensions		
one	Length, m	23.85	
2	Width, m	W + 0.5	
3	Distance between limiters, m	3	

Note: W - vehicle width (according to its maximum dimensions)

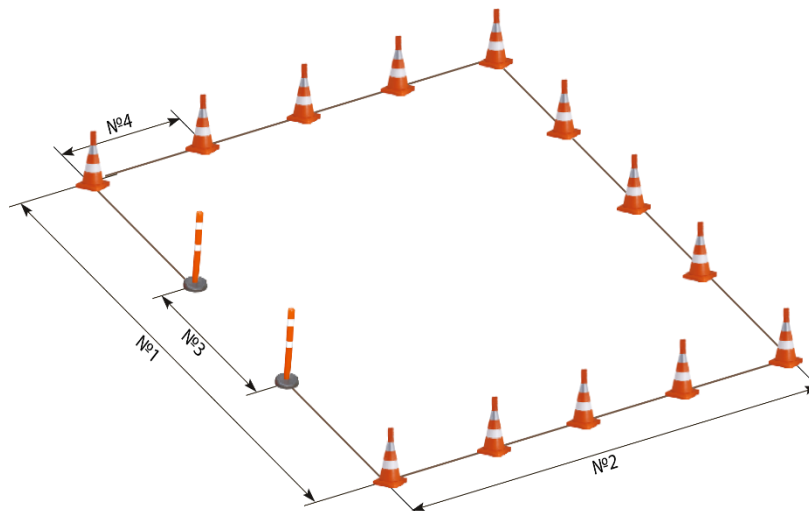


### "Trestle overpass"



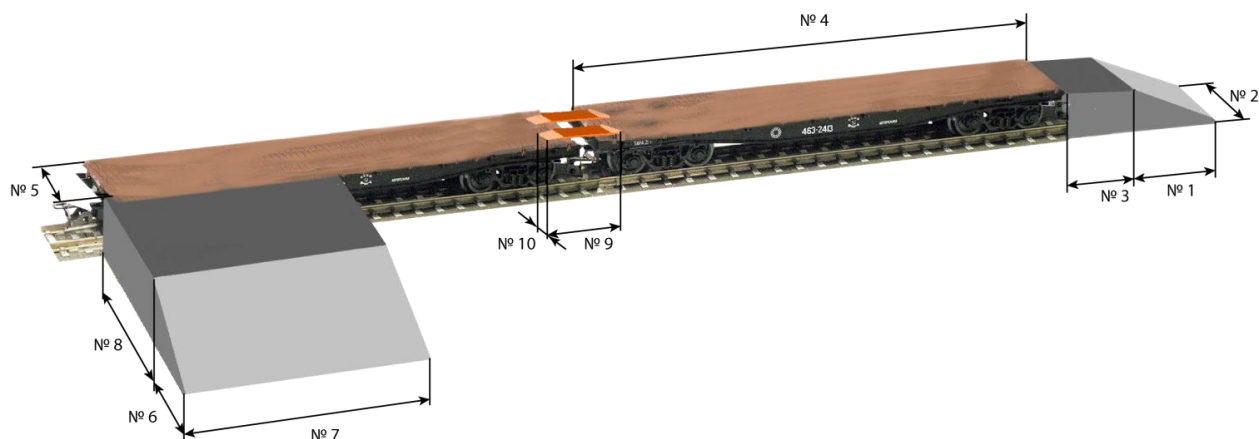
P / p No.	Dimensions	For all cars
one	Length, m	18.02
2	Height, m	1,2
3	Ramp length, m	5
4	Walkway length, m	13.02
5	Track, m	2.01
6	Walkway width, m	1,2

### "Overall yard"



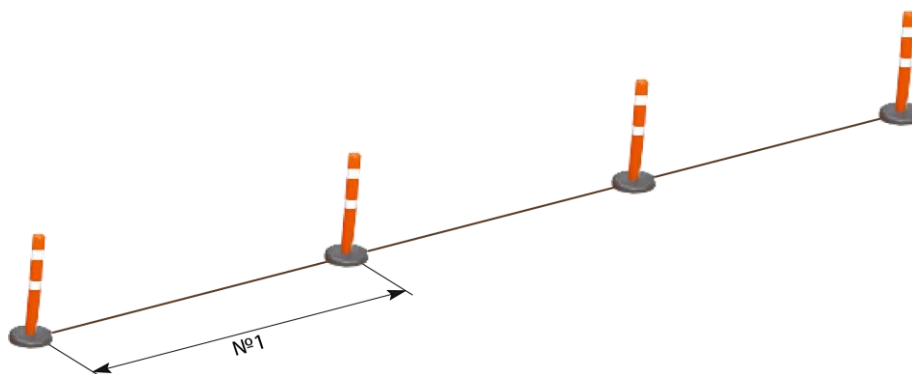
P / p No.	Dimensions	For all cars
one	Length, m	22.95
2	Width, m	15.3
3	Entry width, m	4
4	Distance between limiters, m	2

## "Railway platform"



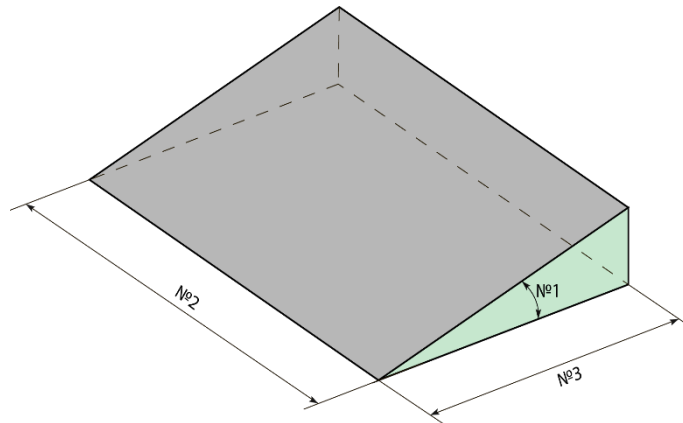
P / p No.	Dimensions	For all cars
one	End ramp length, m	7
2	End ramp width, m	3.5
3	Length of the loading and unloading end platform, m	3
4	Length of the railway platform, m	13.3
5	Width of the railway platform, m	3.1
6	Side ramp length, m	7
7	Side ramp width, m	12
8	Side loading and unloading platform length, m	3
nine	Walkway length, m	1.7
ten	Walkway width, m	0.65

## Elements of the exercise "Overcoming obstacles and obstacles" "Snake"



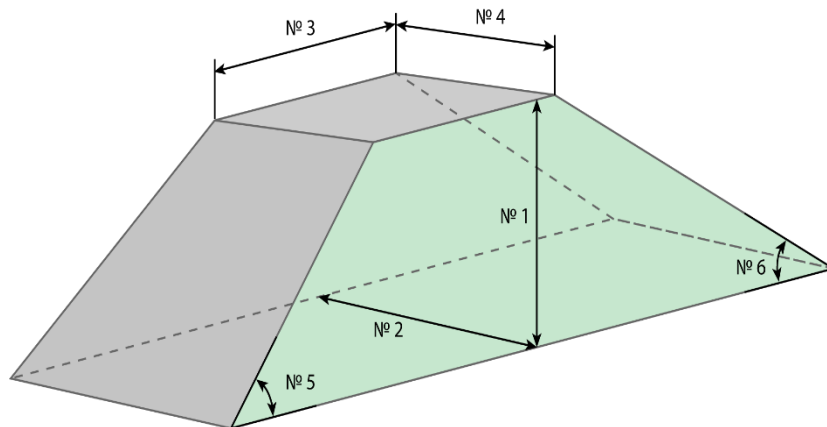
P / p No.	Car	Passenger	Cargo
one	Snake step, m	ten	15
2	Number of cones in an element, units	5	5

### "Slope"



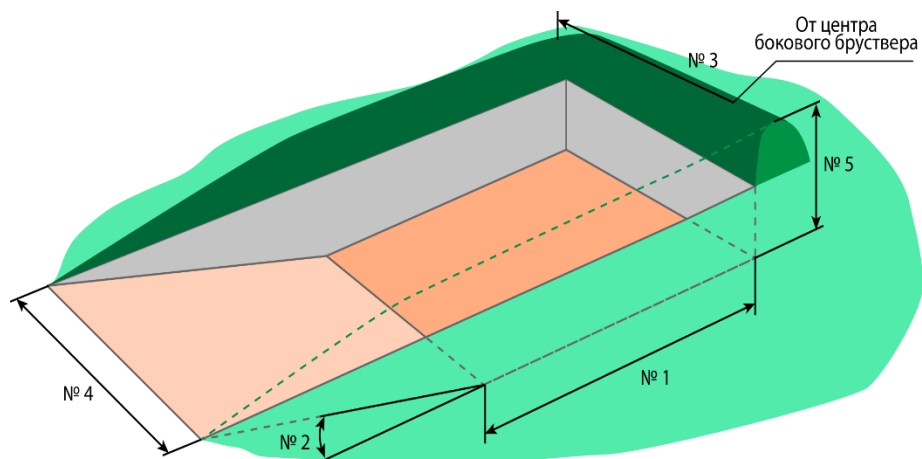
P / p No.	Dimensions	For all cars
one	Slope, %	27
2	Length, m	19
3	Slope length, m	3.56

### "Hill"



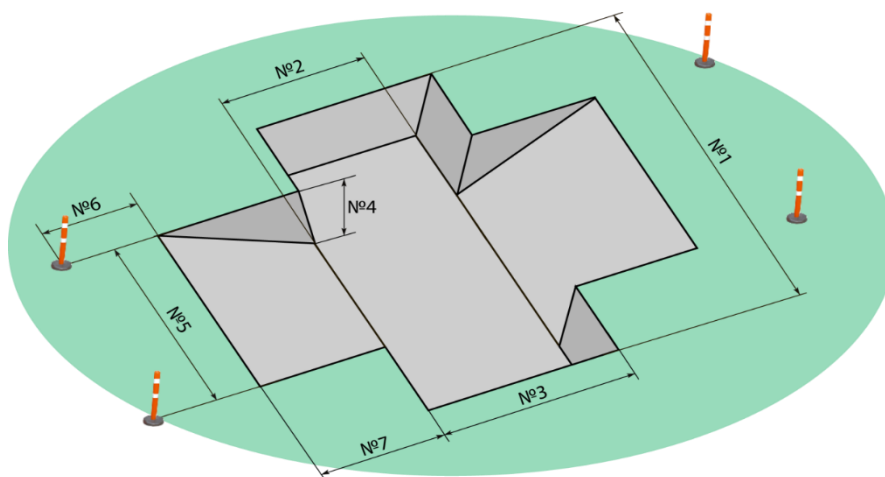
No. p / p	Dimensions	For all cars
one	Height, m	5
2	Width, m	ten
3	Upper platform length, m	12
4	Upper platform width, m	5
5	Front slope, %	27
6	Back slope, %	21

### "Shelter"



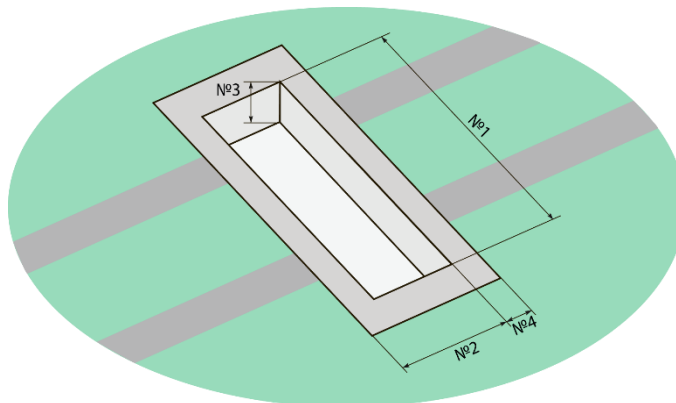
No. p / p	Dimensions	For all cars
one	Platform length, m	eighteen
2	Slope of descent, %	15
3	Width, m	3.8
4	Entry width, m	5
5	Depth, m	3.2

### "Anti-tank moat with a passage"



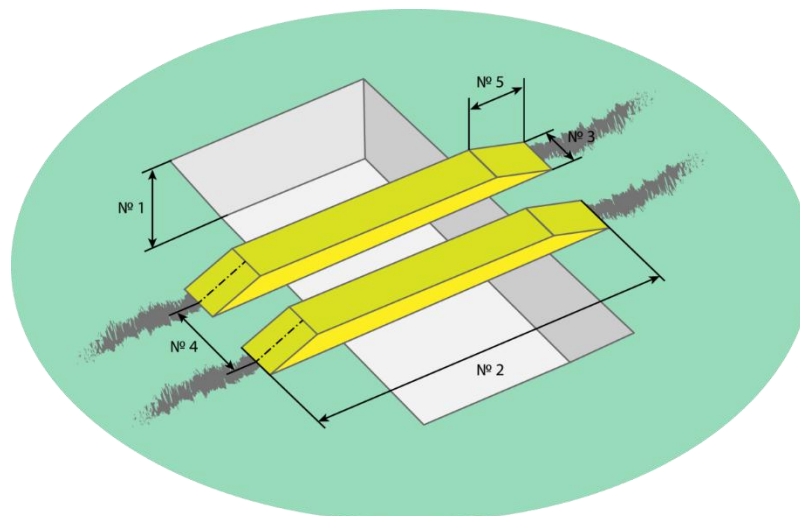
P / p No.	Dimensions	For all cars
one	Moat length, m	6
2	Ditch width along the bottom, m	4
3	The width of the ditch at the top, m	6
4	Moat depth, m	2
5	Passage width, m	4
6	Distance from the restraints to the entrance and exit from the moat	2
7	Length of descent and ascent of the passage, m	5

### "Trench"



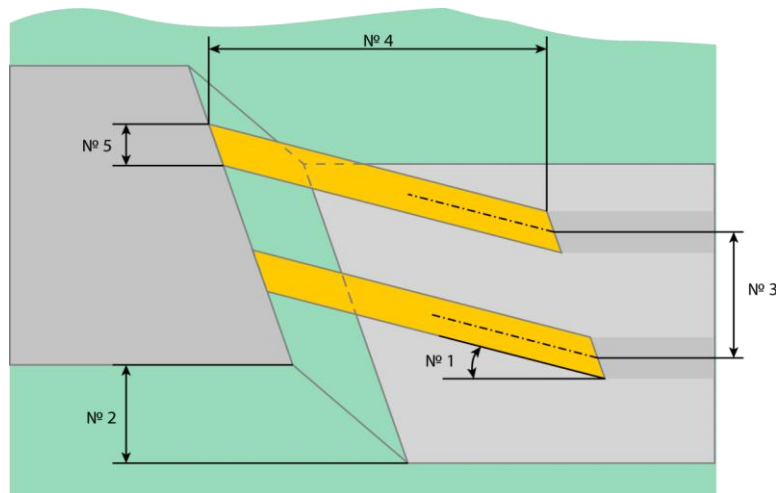
No. p / p	Dimensions	For all cars
one	Length, m	4.8
2	Width, m	one
3	Depth, m	1,2
4	Platform width, m	0.6

### "Moat with a track bridge"



No. p / p	Dimensions	For all cars
one	Depth, m	1.345
2	Walkway length, m	5.8
3	Walkway width, m	0.5
4	Track, m	1.93
5	Ramp length, m	0.2

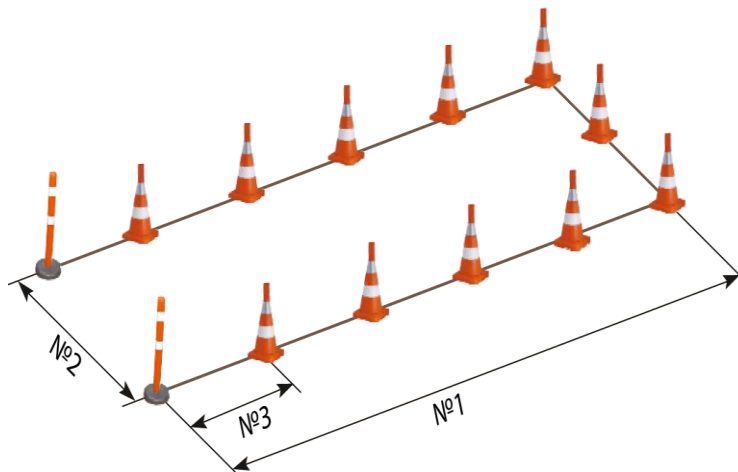
### "Ledge (Counterscarp)"



No. p / p	Dimensions	For all cars
one	Slope, %	22
2	Height	0.83
3	Track, m	2
4	Slope length, m	3
5	Walkway width, m	0.7

### Elements of the exercise "Towing semi-trailers on limited passages "

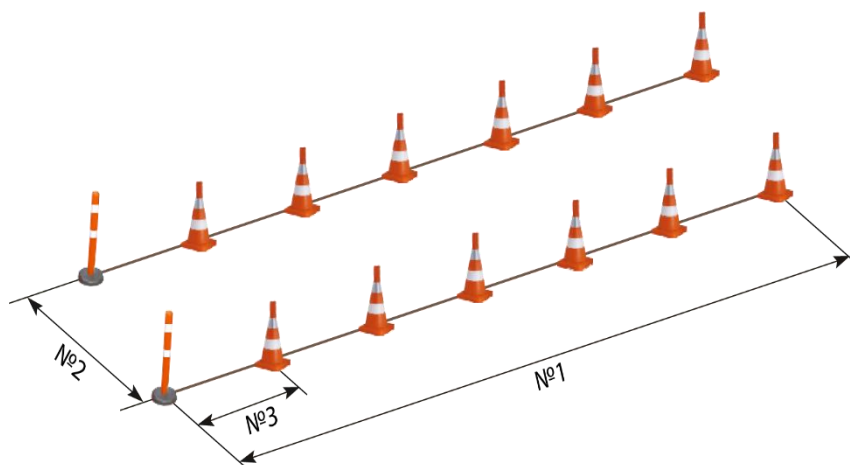
#### "Boxing"



P / p No.	Dimensions	For all cars
one	Length, m	$D + 1$
2	Width, m	$W + 1$
3	Distance between limiters, m	2

Note: W is the width of the semitrailer (according to its maximum dimensions), D - the length of the semitrailer.

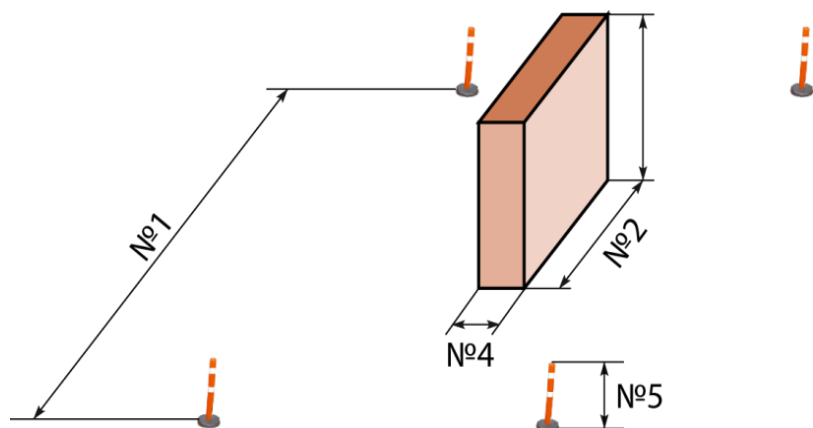
### "Dimensional corridor"



P / p No.	Dimensions	For all cars
one	Length, m	60
2	Width, m	$W + 0.5$
3	Distance between limiters, m	2

Note: W is the width of the semitrailer (according to its maximum dimensions),

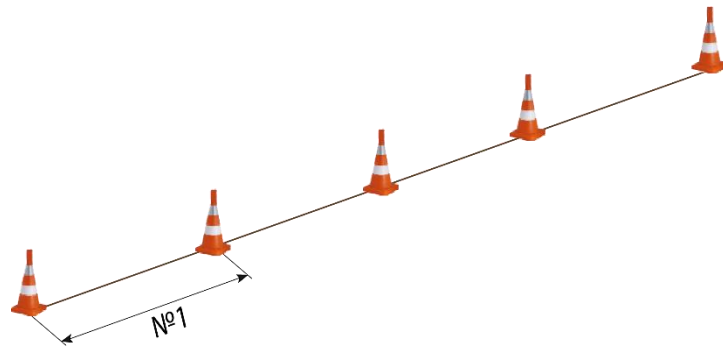
### "Special wall"



P / p No.	Dimensions	For all cars
one	Entry width, m	8
2	Wall width, m	4
3	Wall height, m	2
4	Wall thickness, m	one
5	Limiter height, m	1.7

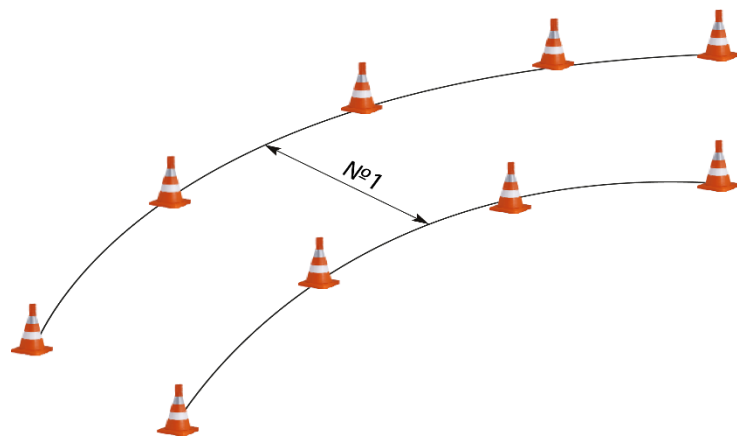
## Elements of the exercise "Driving on a training ground with impromptu obstacles "

### "Snake"



P / p No.	Dimensions	For all cars
one	Snake step, m	8

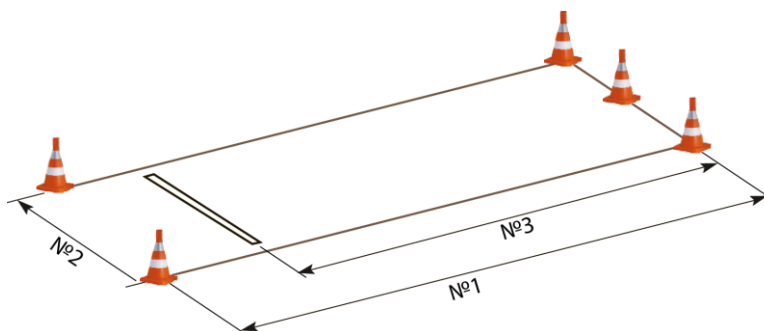
### "Curved clearance corridor"



P / p No.	Dimensions	For all cars
one	Width, m	3.0

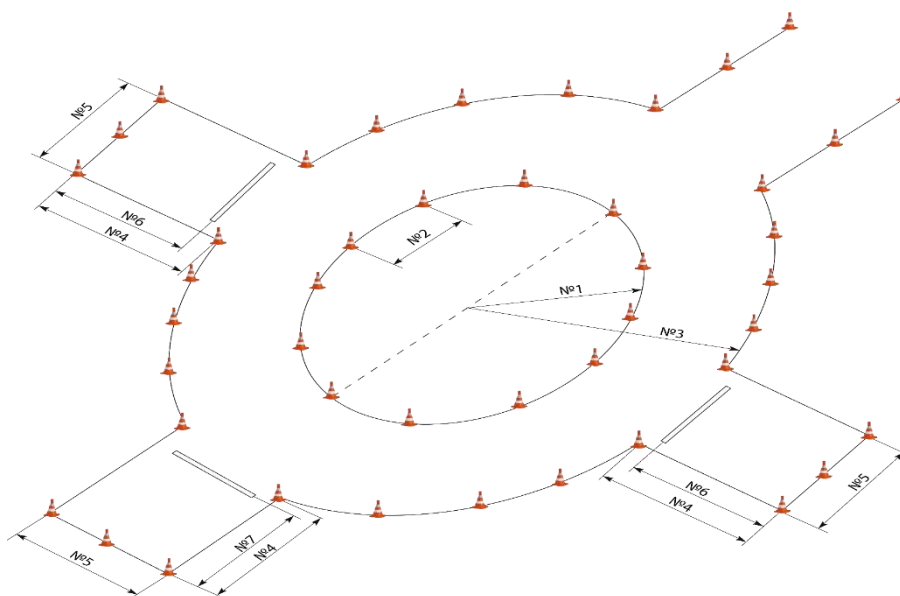


### "Boxing" (for forward drive)



P / p No.	Dimensions	For all cars
one	Length, m	6
2	Width, m	3.0
3	Distance to the line - pointer, m	5.95

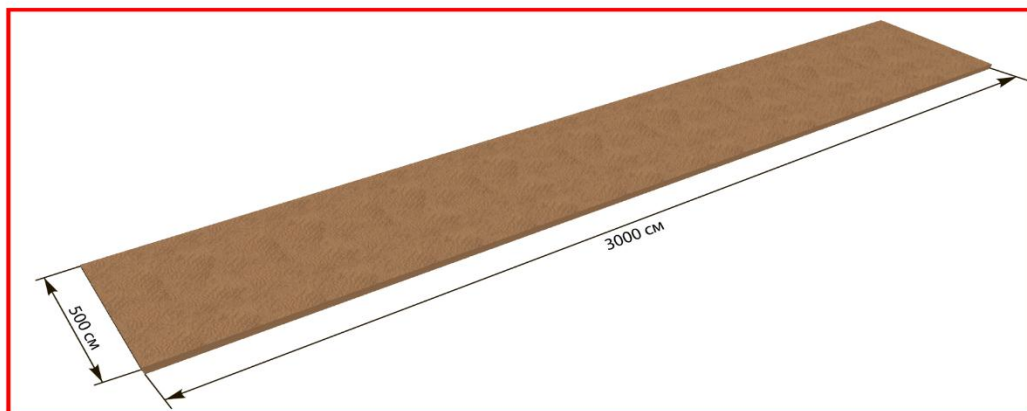
### Circular obstacle section "



No. p / p	Dimensions	For all car	No. p / p	Dimensions	For all car
one	Inner radius of the site, m	13.5	5	Box width, m	3.0
2	Distance between cones, m	2.5-3	6	Distance to the line - pointer, m	5.95
3	External radius of the site, m	eighteen	7	Distance to the line - pointer, m	5.95
4	"Box" length, m	6			

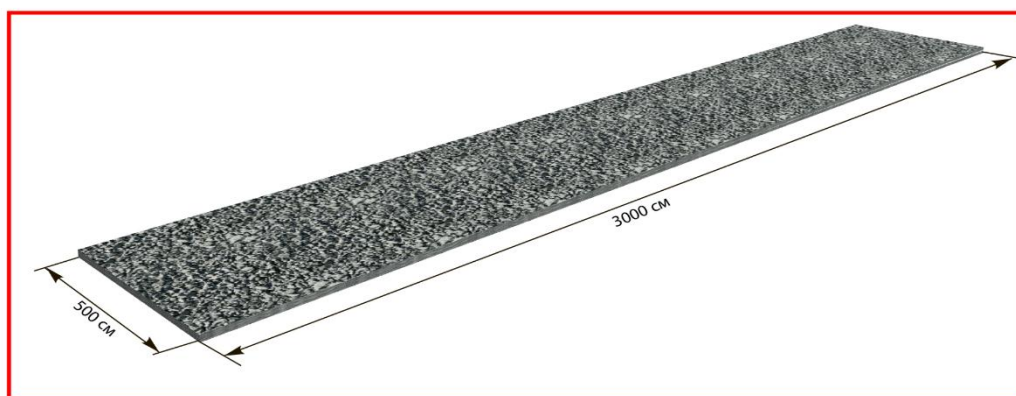
Elements of a site with artificial obstacles  
stages "Competition of captains" and "Team relay"

**Песок**



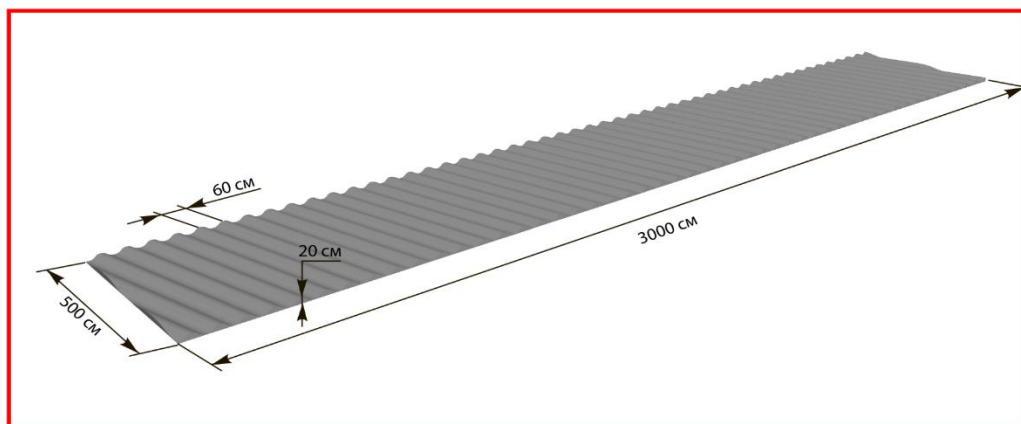
Материал препятствия - песок (40 см).

**Щебень**



Материал препятствия - щебень (40 см).

**Стерня**



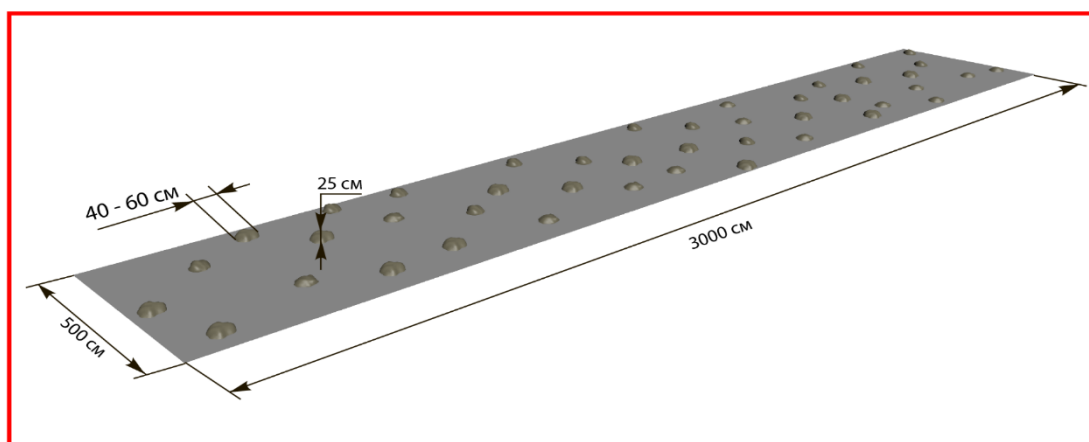
Материал препятствия - бетон.

### Пахота



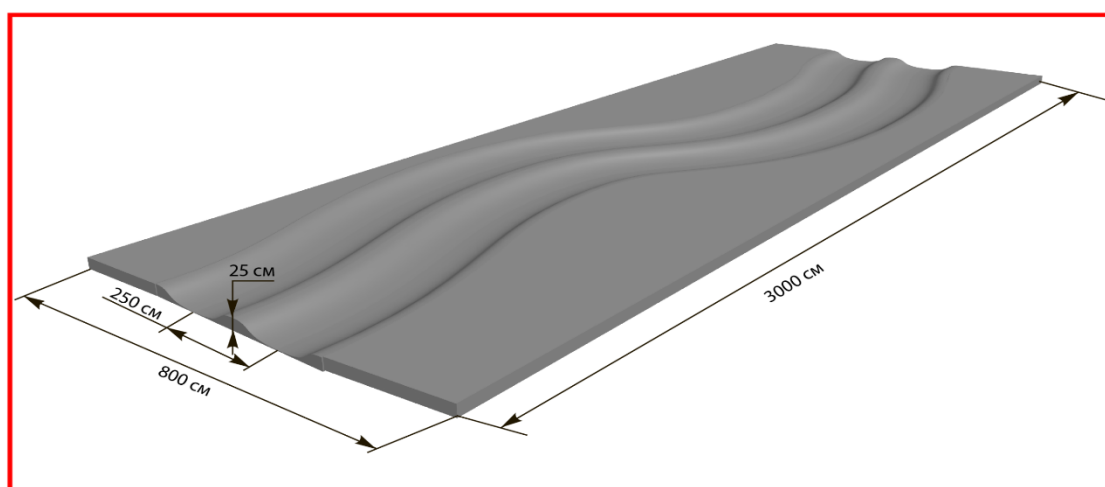
Материал препятствия - грунт и автомобильные шины.

### Каменистый участок



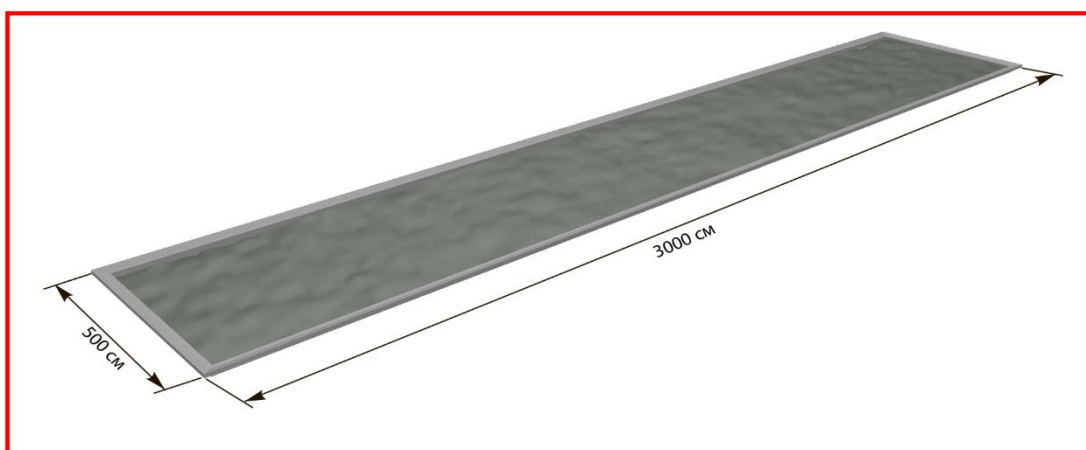
Материал препятствия - бетон.

### Колея



Материал препятствия - бетон. Бетон сверху залит непрозрачной водой.

### Заболоченный участок



Материал препятствия - бетон и мокрый глинистый грунт.

**Bandages for judges**

The Velcro armband is worn on the left forearm.

The armband displays the affiliation of the state, the emblem of the Competition and the position in the judging committee (chief judge, deputy chief judge, judge, arbitrator).

The armband grants the right of passage to the venue of the Competition.

