



UTILIZATION OF SPECIALIZED KNOWLEDGE IN INVESTIGATING CRIMES RELATED TO VIOLATIONS OF TRAFFIC SAFETY RULES OR VEHICLE OPERATION

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Abstract. The article presents the author's views on the significance of utilizing specialized knowledge in investigating crimes related to violations of traffic safety rules or vehicle operation.

Keywords: investigator, inquiry officer, crime scene, inspection, individual rights, individual freedoms, road traffic accident.

Road traffic accidents, by their nature, are extremely complex phenomena resulting from the interaction of mutually influencing factors. Specialized expert knowledge is widely employed in this category of cases to establish causal relationships between accident participants and the resulting consequences. Indeed, among the various tools and methods used by the state and society in detecting and combating crime, one of the most effective is the utilization of specialized knowledge, modern technologies, expertise, and the knowledge and skills of specialists[1].

When investigating crimes related to violations of traffic safety rules or vehicle operation, it is impossible to establish circumstances that need to be proven without the use of specialized knowledge. In turn, this serves to significantly increase the scope of relevant information available to the investigator regarding the incident under investigation, thereby enhancing the effectiveness of the investigator's activities.

Before extensively discussing the use of specialized knowledge, let's examine the opinions of several scholars to gain an understanding of the concept of "specialized knowledge."

Thus, according to E.V. Lomakina, "Specialized knowledge is a system (set) of knowledge obtained through the scientific and practical activities of a specialist, used by them in resolving issues arising in criminal proceedings in the manner prescribed by law..."[2] This definition shows the essence of this knowledge - the scientific and practical activity of a specialist, as well as the possibility of its application in criminal proceedings.

I.I. Trapeznikova, on the other hand, considers specialized knowledge as a person's possession of a system of "scientifically substantiated and practically tested knowledge, theoretical and practical characteristics, and special skills used by knowledgeable individuals in the manner and for the purposes established by criminal procedure legislation"[3]. Here, the author reveals the foundations of knowledge, demonstrating its scientific validity and practical testing. Additionally, the author includes special skills in the knowledge system.

According to I.R.Astanov, "Special knowledge is professional knowledge in a narrow field of science, technology, and profession used for the purposes of initiating a criminal case, preliminary investigation, and judicial proceedings, and used in the search, collection, and evaluation of factual information and evidence related to the crime using modern research methods"[4].

R.S. Belkin indicated that "special knowledge is, first of all, a form of theoretical and practical skills that most people do not possess and are acquired using a specific science or technique, profession"[5].

A.E. Denisov emphasized that special knowledge is a system of knowledge, that is, the skills, abilities, and experience acquired by a limited circle of people as a result of special education, self-development, and self-improvement[6].

Now, since the purpose of the study is to determine the possibilities of forensic examination in the investigation of road traffic accidents, we will consider this form of using special knowledge in criminal proceedings. Indeed, when establishing other circumstances relevant to the case, if it is necessary to apply special knowledge and these circumstances have not been thoroughly established by other means of proof, an examination is mandatory[7].

Expertise, in a broad sense, is a form of using specialized knowledge in a specific field. Forensic examination is a procedural action aimed at clarifying the circumstances of a case in civil, economic, criminal, and administrative proceedings and consisting of conducting forensic examinations and issuing a report by a forensic expert based on special knowledge in the field of science, technology, art, or art[8].

It is known that the appointment of a relevant examination by the investigator in connection with the accident is mandatory. Because in such cases, it is impossible to determine the circumstances and mechanisms of the accident without appointing an expert examination. In addition, criminal liability for the crime specified in Article 266 of the Criminal Code is determined by the fact that, firstly, the person driving the vehicle violated the safety rules for the movement of vehicles or their operation; secondly, it must be proven that this circumstance caused moderate or serious bodily harm to the person.

Currently, the types of forensic examinations carried out by the Republican Center for Forensic Examination named after Academician Khadicha Suleymanova have been increased to 50, and the specialties to 69[9]. Especially in recent years, within the framework of reforms in the judicial and legal system, the organization of a new forensic road examination will serve to further increase the effectiveness of investigating crimes related to violations of traffic safety rules or the operation of vehicles.

We came to the conclusion that the following examinations can be conducted during the investigation of crimes related to violations of traffic safety rules or the operation of vehicles: 1) forensic medical examination; 2) forensic biological examination; 3) forensic fingerprint examination; 4) forensic automotive examination; 5) forensic transport and trace evidence examination; 6) forensic trace evidence examination; 7) examination for the identification of a whole; 8) forensic transport appraisal; 9) expertise of petroleum products and fuels and lubricants; 10) examination of paint and varnish materials and coatings; 11) fibrous materials and products made from them; 12) forensic fire technical examination; 13) forensic electrotechnical examination; 14) examination of the technical condition of vehicles; 15) forensic computer technical examination; 16) examination of video and photo equipment, including for determining the speed of movement of vehicles recorded on video recordings; 17) examination of glass products; 18) forensic soil science experiments; 19) forensic narcological examination.

In our opinion, it would be advisable to dwell on the most frequently appointed and relevant types of forensic automotive, forensic trace evidence, video and photo equipment, including for determining the speed of movement of vehicles recorded on video recordings, among the above-mentioned types of examinations in law enforcement practice today. Before discussing these types of examinations separately, let's elaborate on the general aspects of the investigator's activities related to appointing examinations.

It is no secret that by appointing an expert examination, the expert, with the help of their special knowledge, determines the mechanism of the accident, the technical condition of the vehicle, the condition of the road at the scene of the accident and the actions of road users, as well as the circumstances that contributed to the occurrence of the accident.

The objects of the examination of road traffic accidents are: vehicles involved in road traffic accidents (devices intended for transporting people, cargo, or equipment installed on roads (cars, motorcycles, scooters, mopeds, side carts, tractors, trailers and semi-trailers, bicycles, urban electric transport); Accident scene - the section of the road on which the

accident occurred; case materials (inspection report of the accident scene; Traffic accident diagram; vehicle inspection and technical condition inspection report; investigative experiment report; investigative experiment report; witness, driver, and victim interrogation reports).

The examination of road traffic accidents is divided into the following three types:

1. Forensic examination of the circumstances of road traffic accidents; forensic trace studies;
2. Forensic examination of vehicles;
3. Conducting a forensic examination of the technical condition of the road at the scene of the accident, the condition of the road[10]

Questions must be posed to the expert on issues within their competence, which they can resolve. After all, the questions posed to the expert and his conclusion cannot go beyond the expert's special knowledge[11].

The decision to appoint an expert examination must indicate the following information: the condition of the road (width, type of pavement, presence and size of slopes); the type and technical condition of the vehicle, its load; the speed and direction of movement of the victim, the roadway to the scene of the collision and the distance he covered to the driver's field of vision; the speed and direction of movement of the vehicle or the size of its brake pad; at what part of the brake mark and at what distance from the beginning of the vehicle the victim was hit or the vehicle collided; the radius of the turn of the road, the coordinates of the scene of the incident (impact, collision); the location of shards of glass, crushed spare parts, soil, mud and other objects, the visibility and scale of the road from the driver's seat; the moment when the driver had to foresee the obstacle and, accordingly, the danger to road traffic arose, as well as its results, if an experiment was conducted.

Along with the decision to appoint an expert examination, the investigator must also provide the expert with: the report of the inspection of the scene of the road traffic accident; Diagram of the accident; protocol of inspection and examination of the technical condition of the vehicle; protocol of the investigative experiment, if it was conducted; protocols of questioning witnesses, drivers, and victims; photo and video materials about the incident under consideration (if any) [12].

The accident scene inspection report must contain the following information: the nature and type of road surface; the width and condition of the road and roadside; the presence of ditches; the magnitude of the angle of ascent or steepness of the descent and the radius of the turn; the presence of road signs and the method of traffic regulation; the location of the braking lane, its length and nature (slip or circle of the braked wheel), the impact point, the location of the collision, their connection to road elements, and other stationary signs; the presence of blood, brake fluid, oil traces, as well as fragments of glass, paint particles, and parts separated from the vehicle; the circumstances under which material evidence was discovered and seized; the direction of movement of the vehicle before, during, and after the collision; the nature, form, and extent of damage to road objects; road visibility from the driver's cabin. High-quality photographs of the scene, taken in various directions and methods, must be attached to the report.

The road traffic accident diagram should indicate the following: the precise position of the vehicles relative to road signs and objects; the location, condition, and dimensions of material evidence and other evidence relevant to the case; the location where the injured pedestrian fell, the location where the objects they were carrying fell, the victim's condition, and the vehicles; information characterizing the road, in particular, the type of road surface (concrete, asphalt, rubble) and its condition (dry, wet, dirty, ice, snow cover); the presence and location of road defects; the road profile indicating the precise value of the angle of ascent or descent, the direction of movement of vehicles; the width of the road, the roadside, the features of the ditch and the external environment of the road, its appearance, the presence

and precise location of objects limiting visibility; the location of road signs; the point of collision; the fixed point.

Forensic Automotive Examination. Forensic automotive examination is one of the methods for determining the circumstances of road accidents[13]. To improve the tactics of its appointment and evaluate the expert's opinion, it is necessary to clearly understand the essence of this procedural action.

Forensic automotive examination is divided into several types. Each type is distinguished by its specific subject, objects, research methods, and a set of materials that must be submitted for examination. Taking this into account, forensic automotive expertise is divided into the following types: 1. Examination of the accident mechanism using mathematical methods; 2. Examination of the technical condition of the vehicle; 3. Examination of traces (transport-tracological) of the vehicle and at the scene of the accident; 4. Expertise of roads; 5. Transport valuation expertise.

For all types of forensic autotechnical examinations, the following are examined objects: motor vehicles, electric vehicles, tractors, and other vehicles that were participants in the road traffic accident; Road, field, courtyard where the road traffic accident occurred; Material evidence and case documents (materials) related to the accident.

The subject of the forensic automotive examination is the technical condition of the vehicle, the road situation at the scene of the accident and the actions of the participants in the accident, the circumstances that caused the accident, and factual data related to the case related to the mechanism (process) of the accident.

In the process of conducting a forensic automotive examination, methods of inspection, measurement, comparison, mathematical and modeling are used.

Forensic automotive examination resolves the following three types of issues: firstly, the examination of the mechanisms of road traffic accidents determines the speed of movement of vehicles, the distance, the technical possibility of stopping, the distance of stopping, the mutual (distance-specific) position of the vehicle and the other participant in the incident when the driver had the last opportunity to eliminate the accident; secondly, the examination of the technical condition of the vehicle determines the technical condition of the vehicle and its individual parts, the causes of technical malfunctions, when they appeared in relation to the accident, and whether there is a causal link between the identified malfunction and the incident; thirdly, the traceological examination resolves issues related to determining the mechanism of injury in vehicles, the relative position of vehicles at the time of the accident, on which part or on which side of the roadway the collision occurred, and the static or dynamic (standing or moving) position of vehicles at the time of the collision. Here, with the permission of an expert, the question may arise whether certain actions of a driver or pedestrian, assessed from the point of view of their non-compliance with traffic safety requirements, are causally related to the consequences of the crime[14].

To resolve these issues, the expert is provided with the necessary materials obtained during the investigation: material evidence; reports of inspections, investigative experiments, questioning of witnesses; drawings, photographs of the scene, etc.

The case materials submitted for the appointment of a forensic automotive examination must contain the following information: pavement of the roadway and roadside sections (asphalt, concrete, etc.); condition of the roadway (dry, wet, muddy, snow, ice, etc.); width of the roadway and roadside sections; organization of traffic in this section of the road (one-lane, two-lane, one-way, etc.); presence and placement of road signs; visibility distances from the front and sides of the road; technical condition of the vehicle (steering, braking system, lighting system, etc.); degree of load on the vehicle (number of passengers for passenger cars, motorcycles); speed of movement in the absence of brake marks or marks indicating the movement of the vehicle; length of the marks indicating the movement of the vehicle and from which parts of the vehicle they were left (for example, front, rear or all wheels, traces of

friction when sliding sideways); distance of the point of occurrence of the incident relative to the edges of the roadway.

If a vehicle hits a pedestrian in an open area, i.e., where there is no obstacle preventing the pedestrian from seeing, the following information is submitted to the expert's discretion: the time when the danger to the driver's movement arose; at what speed or in what time the vehicle covered the distance to the scene of the accident after the danger arose; details of the pedestrian's actions before moving towards the scene of the accident; the distance the vehicle covered before stopping after the accident (if there is a braking noise, its length after the scene of the accident); which part of the vehicle hit the pedestrian, and if it hit with a part other than the front part, the distance from the front part to that place; the distance the vehicle moved from the edges of the roadway; if the pedestrian in motion changed the speed or direction of movement or stopped, if there is no information about the distance covered at each speed, the time of movement at each speed and stopping.

In order to accurately determine the distance, speed, or time of movement traveled by a pedestrian, it is recommended to verify the testimony at the scene of the incident and conduct an investigative experiment. In this case, tables of pedestrian speeds may not provide reliable data. If a pedestrian has come out behind an obstacle, in addition to the information mentioned above, the following additional information is required: the location of the obstacle relative to the roadway, i.e., how many meters away from the roadway, what part of the roadway it occupies; dimensions (height, length) of the obstacle; the distance from the obstacle to the pedestrian's path; the lateral distance between the obstacle and the vehicle.

If a pedestrian follows an oncoming vehicle, the following information is also required: the speed of the oncoming vehicle; the distance at which the oncoming vehicle moved relative to the edges of the roadway; the distance from the rear of the oncoming vehicle to the pedestrian.

Forensic trace evidence examination. The objects of this examination include injuries from vehicles, criminal case materials (primary documents compiled on the incident, in some cases forensic medical examination conclusions, photographs of the scene and vehicles).

Determination of the mechanism of formation of injuries in vehicles, the relative positions of vehicles at the time of the incident, where or on which side of the roadway the collision occurred, the static or dynamic (standing or moving) position of vehicles at the time of the collision is carried out on the basis of knowledge in the field of criminalistics and automotive engineering.

This examination addresses the following issues: determining the mechanism of injury in vehicles; determining the position of vehicles relative to each other at the time of the collision; determining the angle at which the longitudinal axes of vehicles were aligned (relative to each other) at the time of the collision; determining which parts of the vehicles initially and subsequently collided with; determining how the incident began based on traces at the scene; determining where the collision occurred on the roadway; determining on which side of the roadway the collision occurred; determining the angle at which the vehicles were aligned with the roadway at the time of the collision; determining the direction of movement of the vehicles before, during, and after the collision; determining whether the vehicles were in motion or one of them was parked at the time of the collision.

The vehicle being inspected must be submitted for forensic trace evidence without changing its condition after the accident. A specific road traffic accident is a non-repeatable event, therefore, if the damage to the vehicle has been modified or repaired, it is impossible to resolve a number of issues of this examination.

The successful resolution of the questions posed to the expert examination also depends on the completeness and quality of the submitted documents.

Incomplete documentation and discrepancies in their measurements reduce the possibility of resolving the issue. Accordingly, questions for resolution should be posed in accordance with the information submitted for examination.

For example, determining the formation of injuries in vehicles, their relative positions, whether they were in motion or not is resolved through examining traces and injuries in vehicles and reviewing the criminal case. To determine the location of the collision, the crime scene inspection report, drawings, photographs, and other documents are used.

Objects of vehicle inspection are: molds taken from volumetric traces and images taken from surface traces; photographs of roads taken in accordance with large-scale photography rules; items with signs (clothing, footwear); parts or components of the vehicle (car tires or tires, parts of headlight lenses, direction indicators, windshields, paint parts); person or corpse if tire traces and bruises are detected on the corpse (comprehensive examination is appointed with forensic medical expert participation) [15].

The specialist traceologist is asked questions necessary for forensic traceological examination, depending on the objects and subject of research, goals and objectives of the research.

Examination of video and photo equipment, including the determination of the speed of movement of vehicles recorded on video recordings. This type of examination was organized within the structure of the Main Expert-Criminalistics Center of the Ministry of Internal Affairs in accordance with the Decree of the President of the Republic of Uzbekistan dated February 8, 2022 No. PP-122 "On Measures for Further Improvement of the Expert-Criminalistics Activities of Internal Affairs Bodies with the Wide Introduction of Modern Scientific Achievements."

We live in the age of globalization and information technology. Science and technology are developing day by day, and as a result, new technologies are being created. These processes, along with other spheres of our society, are directly reflected in the investigation of crimes, especially in the process of proving a specific type of crime. This is especially evident in the investigation of crimes related to road accidents.

Currently, video recordings from a video recorder or mobile phone can serve as evidence confirming the driver's guilt or innocence in the accident. However, such evidence is not always reliable due to the possibility of editing the video recording, as well as due to unfavorable conditions or poor quality recording. Therefore, in such cases, in order to eliminate contradictions and establish certain facts, it is advisable to appoint an expert examination to determine the speed of movement of vehicles recorded on video and photo equipment, including video recordings.

Through this examination, the following can be determined: vehicle speed; vehicle trajectory and maneuver; factors hindering the integrity of video recording, whether it was edited; specifically the vehicle that caused the accident.

Achieving the intended goal through the appointment of an expert examination directly depends on the quality of the video recording submitted for the study and the available materials.

The following questions may be posed to the expert for resolution: what was the speed of the vehicle before the collision?; what was the braking distance of the vehicle?; did the driver brake before the collision?; did the driver try to prevent the collision?; Which specific vehicle was involved in the accident?

Comparative-legal and systematic analysis, based on logic, conducting statistical and sociological surveys, analysis of pre-investigation verification and criminal case materials, as well as court verdicts, shows that a number of errors and shortcomings are currently being made in the appointment of expert examinations by practicing employees on crimes related to violations of traffic safety rules or the operation of vehicles, and it is necessary to pay special attention to a number of other cases. We can see them in:



Firstly, the study of the materials of the pre-investigation check and the documents of the criminal case, as well as the results of interviews with the experts of the Republican Center for Forensic Expertise named after Kh. Suleymanova under the Ministry of Justice of the Republic of Uzbekistan, showed that today in law enforcement practice there are many mistakes and shortcomings, such as low-quality, template-based decisions by investigators and inquiry officers on the appointment of an expert examination, and the posing of questions that do not fall within the competence of the expert.

In our opinion, each accident occurs in its own way. The place, time, state, and mechanism of its occurrence are fundamentally different. Therefore, in the decision on the appointment of an examination for each traffic accident, questions should be posed to the expert for resolution based on the circumstances.

Secondly, as we all know, along with other crimes, the circumstances specified in Article 82 of the Criminal Procedure Code must be proven in cases of violation of traffic safety rules or operation of vehicles. One of them is the causal link between the act and the resulting socially dangerous consequences. However, today, during the inspection of the scene by practicing personnel, the condition of the road and objects that prevent the driver from seeing the road condition are not being assessed at all. In fact, judging by the road infrastructure in our country, the condition of roads is the cause of many accidents. Unfortunately, in such cases, there is no norm in the Criminal Code providing for criminal liability for the guilty persons. Until recently, there wasn't even a type of road assessment.

In accordance with the Decree of the President of the Republic of Uzbekistan dated January 17, 2019 No. PP-4125 "On Measures for Further Improvement of Forensic Expert Activities," a forensic road examination was organized at the Republican Center for Forensic Expertise named after Kh. Suleymanova under the Ministry of Justice of the Republic of Uzbekistan. The appointment of this examination occurs in cases where the unsatisfactory condition of the road could have caused a traffic accident. During the inspection, the compliance of this road section with the established technical and safety requirements is determined.

The subject of forensic road examination is the features of the construction and operation of roads, their elements, interaction with the environment, as well as features associated with road accidents. During the examination, in addition to the above, road markings and signs are also studied, and their compliance with the requirements of the established standards is determined. Also, the degree to which road signs and road markings are compatible with each other, that is, not opposite, and the impact of this situation on road accidents are necessarily studied. This examination solves the following tasks: determination of the qualification characteristics of roads; determination of the technical condition of the road and structural elements of road conditions; Compliance of the technical condition of the road section where the accident occurred, its elements, and road conditions with regulatory and technical documentation; determination of the time and causes of road defects affecting traffic safety; determination of the impact of a decrease in the operational characteristics of the road and its constituent elements on the mechanism of the accident; determination of the degree of the driver's complete knowledge of road conditions on the investigated road section, etc.; Determination of the condition of road markings, road signs, and other road structures at the scene of the accident, their compliance with standards; identification of the causes of the accident by malfunctions on this road, incorrect drawing of road markings, and incorrect placement of road signs.

In our opinion, most practitioners do not have a sufficient understanding of the existence of this type of expertise. Based on this, it is advisable to ensure that investigators on the ground have a complete understanding of road forensic examinations, organize training sessions to familiarize them with the sample of the decision to appoint an examination and

the sequence of questions, and include this issue in the training schedules of investigators visiting for advanced training.

thirdly, although we live in an era where modern information technologies are at the peak of development, we are not effectively using them, or many practicing investigators lack the skills to use modern information technologies. Today, a place without a surveillance camera and a car without a video recorder is extremely rare. In fact, these factors should serve to improve the quality and effectiveness of investigating the type of crime under investigation. For this purpose, an examination of video and photo equipment has been organized, including the determination of the speed of movement of vehicles recorded on video recordings. During the interview with the experts, it became clear that the possibility of this examination is the most important source of proof for investigators, however, errors made by investigators in obtaining video recordings from surveillance cameras or video recorders lead to the disappearance of the most important evidence.

In our opinion, in order to ensure the full use of the capabilities of information technologies by investigators and inquiry officers in the investigative process, it is necessary to create an integrated system for training, retraining, and advanced training of qualified personnel in this area.

We believe that these proposals and recommendations will serve the qualitative, complete, and comprehensive investigation of crimes related to the violation of traffic safety rules or the operation of vehicles through the full and appropriate use of specialized knowledge.

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