

A SYSTEM OF TECHNICAL-CRIMINALISTIC MEANS OF SCANNING THE SCENE OF AN ACCIDENT

Abdullaev Rustam Kakhramanovich,

Teacher of the Department of Criminalistics and Forensics science, Tashkent State
University of Law;

E-mail: r.abdullayev@tsul.uz; ORCID: 0000-0001-8742-4815

Abstract: The article on the basis of scientific works of national and foreign criminologists and analysis of the practical activities of law enforcement agencies describes the importance of systematization and classification of scientific-technical and technical-criminological means used in the investigation of the scene, it is scientifically based on the purposefulness of systematization of the technique-criminalistic tools used in the field of sight of the place of the accident to two levels. Technical and forensic tools used in the examination of the scene to identify traces of papillary patterns (fingers and toes) on the objects of research; detection of micro-objects; search for metal objects; detection of non-metallic molds and objects; detection of audio-, video-recordings or photographic images; technical-forensic means to identify the complex of traces are classified.

Keywords: scene inspection, technical and forensic tools, systematization, classification of technical-criminalistic tools, detection of micro-objects, complex of traces, importance of systematization.

In modern conditions, when inspecting the scene, it is possible to ensure the completeness and quality of detection, recording and retrieval of traces and objects of crime, as well as other information of forensic significance, using only forensic techniques. Therefore, the task of the investigator (official of the body conducting the pre-investigation investigation, the inquiry officer or the court), the forensic expert - is to use these tools in a complex way, as a result, it is possible to ensure the effectiveness of the investigation and, consequently, the effectiveness of the criminal investigation.

Technical and forensic means of crime scene investigation – equipment, devices, devices specially designed or adapted for the purpose of detection, recording, acquisition, investigation, registration, analysis and evaluation of traces of crime and other physical evidence in the course of crime scene investigation, materials, information retrieval and other systems, as well as a system of forensic technologies of their application.

The issues of systematization and classification of scientific-technical and

technical-forensic tools have been and still are given great attention. Many forensic scientists have published works on the subject. The system of scientific and technical means and the forms of their use in the investigation of crimes were proposed by G. Gramovich [1, P. 48-50], and we use these scientific ideas as a basis for creating a system of technical forensic means of crime scene investigation. Given the invaluable value of this research, it should be noted that the rapid development of new technical forensic tools and technologies in modern conditions and their application in the practice of combating crime – requires further improvement.

Systematization of forensic tools has both theoretical (provides systematization of accumulated knowledge) and direct practical significance (helps to choose the right direction depending on the type of knowledge provided by forensic science and the specific investigative situation, complexity of tasks and organizational capabilities) [2, P.149]. It is especially important to systematize forensic tools to examine the scene, as they are almost always complex and complex in nature, requiring simultaneous examination of the area, objects, documents, and sometimes the corpse during the investigative process. Moreover, the various objects located at the scene of the incident are not a mechanical disorder, but a specific set (sum) of interrelated traces of the crime and material objects [3, P.83], which, of course, requires a meaningful and comprehensive use of technical forensic tools. Qualitative fulfillment of these requirements requires a clear knowledge of the system of technical forensic tools.

The system of forensic tools used to investigate the scene has not yet been fully determined. It is well known that “review is the first and most urgent procedural action in most criminal cases. Therefore, the investigation of the scene is allowed before the criminal case is initiated” [4, P.210]. In addition to the above considerations, it is worth noting that the effective solution of the main tasks of crime scene investigation is possible only on the basis of a systematic approach to the use of the whole set of modern forensic tools.

Taking into account the modern achievements of science and technology, as well as the analysis of the views of scientists, based on a comprehensive approach and in order to study, we tried to systematize the forensic means of crime scene investigation. This, of course, will increase the effectiveness of this investigative action by identifying existing problems, as well as the correct selection and use of all the necessary technical and forensic tools, as well as the clear direction in their diversity. Some authors in the forensic literature systematize scientific-technical and technical-forensic [1, P.53-54; 5, P.18]; and a second group of authors - classification [6, P.16; 7. P.9; 8, P.10; 9, P.50; 10, P.94; 11, P.12-13; 12, P.44]. At the same time, G.I. Gramovich's opinion that “classification and systematization are different

concepts” seems to be true [1, P.44]. Because in the explanatory dictionary of the Uzbek language there is “**systematics**” (Greek “systematikos” - systematization, ordering) – a classification of a kind, interconnected thing and event according to their mummy features “[13, P.527] “**Classification** (selection; classification into species) – the division of objects and events into species, categories, etc., depending on their specific characteristics” [13, P.11]. It can be seen that the classification is always linear, in contrast, a large number of coordinating and subordinating relations must be taken into account in the systematization grouping, otherwise it will not be possible to obtain a system that reflects reality.

With the help of classification (classification) it is impossible to determine all the types and diversity of relationships between groups, objects, which appear as a single system. In this case, it is advisable to use systematization in accordance with the rules of logical grouping.

The existing forms of application of technical-forensic means of crime scene investigation are interconnected, based on common principles and are aimed at achieving the goals of this investigative action, therefore, it would be logical to consider a set of technical forensic tools as a single system - a system of elements that are systematized, interconnected and form a whole in a certain order. Each element of this system is connected to the others. In order to clearly divide the forensic tools into groups, it is necessary to determine the basis of division in the form of important features of the system, which are “not only a specific set of elements and dynamic structure, but also the nature of interaction with external conditions” [1, P.41-44, 56].

Since forensic tools are an integral part of scientific and technical means, it is necessary to use the same approaches used in the classification of scientific and technical means in the systematization of technical forensic means of crime scene examination.

In particular, Professor G.Abdumajidov and others “Forensic techniques and methods are divided into the following groups: The first group includes photography, video and audio recording, film recording equipment, biological microscopes and other optical instruments used in the detection, investigation and prevention of crimes, automobile and aviation transport, telephone, telegraph, phototelegraph, radio, analytical devices, computers, technical means. The second group consists of technical means adapted for forensic purposes, taken from various branches of science and technology. These include various lamps used in the use of ultraviolet and infrared rays, search tools, a mobile forensic laboratory. The third group consists of techniques and methods specially prepared for forensic purposes. These include technical means of modeling the appearance of the wanted person, optical

instruments that study papillary patterns, arrows, cartridges and other objects, search tools and materials used to investigate traces at the scene "[15, P.47-48].

A number of scientists systematize scientific and technical means as follows:

1) according to the tasks to be solved in the process of criminal investigation [16, P.92];

2) according to the methods [17, P.25];

3) according to the functions it performs [1, P.53-54];

4) according to the directions arising from the functions related to the activity [18, P.14];

5) according to the functions performed by these directions and the field and subjects of application [5, P.18].

Other authors classify technical forensic tools only according to their intended purpose, For example, A. Zakurlaev and K. Mahmudov divide forensic technical means into the following groups (of course, conditionally) according to their intended purpose: 1) technical means that expand the limits of acceptance; 2) technical means to improve the conditions of reception; 3) technical means that allow to determine the quantitative characteristics of the object under inspection; 4) technical means that allow to determine the qualitative characteristics of the inspected object; 5) technical means that allow to objectively record the research process and the process of obtaining results; 6) technical means to facilitate thinking activities; 7) technical means that allow to collect the required information in unlimited quantities, analyze them and return them when necessary; 8) technical means that facilitate verification of the accuracy of the acquired knowledge in practice [19, P.57].

S. Esengeldiev identifies the following ten groups of tools: 1) record the condition of the scene and various traces and objects that are important for the work; 2) detection of invisible and invisible traces; 3) search; 4) strengthening and removal of traces; 5) taking fingerprints; 6) for making composite portraits; 7) tool-markers; 8) universal means; 9) systematization and provision of forensic information; 10) for laboratory examination of material evidence [8, P.10].

In addition to the general positive direction of the classifications on the above grounds, there are significant shortcomings that prevent the use of such grounds in the systematization of technical-forensic means of crime scene investigation. For example, the classification of tools by area of application is not sufficiently detailed; in the areas of knowledge, however, it does not have a clear practical meaning to achieve the purpose of on-site inspection. The distribution of tools by subject of use is also controversial, as it is difficult to clearly distinguish the means used by an investigator, specialist, or other entity. Dividing into groups according to the origin of the forensic means of crime scene investigation is important to determine their

understanding, but "facilitating their study does not provide the necessary assistance to determine the specifics of their application and the goals that can be achieved using these features" [1, P.50].

Classification of scientific and technical means on the basis of different bases at the same time is carried out to the extent that it consists of a set of independent classification structures that are not identical, interdependent and form a single system, which does not allow the use of a systematic approach. In addition, the rules of division are not always followed. For example, in the classification of scientific and technical means by type, the set can include devices and instruments divided into independent groups of the same level. The classification by the intended purpose of the forensic means is noteworthy, but even in such a classification the rules of division do not apply: the same means (e.g., means of recording) are included in two groups.

Such systematization consists of a number of functions that are regulated by the relevant procedural norms of the Republic of Uzbekistan (detection, recording and receipt of traces of crime and evidence) and non-regulated, so that the systematization of technical forensic tools contributes to the solution of the task of scene investigation. should be consistent with the structure of the activity in conducting the on-site inspection, as well as provide accounting, collection, processing, systematization and analysis of data of forensic significance.

It is advisable to systematize the technical and forensic tools used in the investigation of the incident at two levels, in this case, the basis for the first level systematization – in the functional direction, the basis for the second level systematization – on the objects for which technical-forensic means are used for identification. For example, the technical forensic tools used in the inspection of the scene at the first level can be divided into the following groups according to the functions they perform: 1) identification of traces of crime and other objects; 2) registration; 3) obtaining traces of crime and other forensic objects.

Each element of the first level of the proposed system should be considered as a subsystem, which helps to systematize the technical-forensic tools at the next level. In the framework of this work, the systematization of the objects on which these tools are used was considered in order to identify the first group of the most important technical and forensic tools.

At the second level to systematize the technical-forensic tools used to identify traces of crime and other objects in the examination of the scene, many forensic scientists take objects as a basis for systematization, technical-forensic tools are used to identify these objects. This includes the detection of fingerprints, metal objects, hidden places, corpses or parts thereof, blood, saliva, layers of various chemicals,

micro-objects and other means of detecting traces [1, P.76; 10, P.94]. The classification system proposed by P. Skorchenko is also correct, according to the scientist, technical forensic tools for detection are divided into four subgroups: to search for invisible and weakly visible traces, micro-objects, metallic and non-metallic objects [11, P.30].

Systematization of forensic tools designed to determine the above points on the basis of analysis requires unification on the following grounds:

First, hand-fingerprint detection tools actually include sweat-oil trace detection tools. It is preferable to call the group of forensic tools used to detect fingerprints “forensic tools used to detect traces of papillary patterns (fingers and toes) when examining the scene”. In our opinion, the proposed name fully reflects the functional direction of this group of technical-forensic tools, and thus identifies a list of criminal traces, ensuring their significant completeness for the effectiveness of the investigation of the scene.

Secondly, the identification of the corpse or parts of it; detection of blood, saliva-like spots (“spots of biological origin” [21, P.29]); dust particles from shoes in textiles; explosives, drugs and chemicals; it is expedient to combine the means of finding a person, the means of finding hidden places [11, P.52] into a single group called “technical forensic tools used to detect non-metallic traces and objects when inspecting the scene”.

Thirdly, in connection with the computerization of activities in all spheres of modern society, due to the emergence of new objects of forensic research, such as electronic devices with memory function, separate "technical forensic tools used to detect audio, video or photographs in the scene" it is desirable to separate the group, because “audio-video recordings and photographic images, unlike other material traces, allow to quickly identify a person” [14, P.15].

Fourth, as modern devices are being developed that allow the detection of traces of different types and nature, it is necessary to distinguish a separate group of “forensic tools used in the examination of the scene to identify traces”.

Thus, when examining the scene, it seems expedient to systematize the technical and forensic means to identify traces of crime and other objects, **on the objects** for which such means are used. Бу каби асосда техник-криминалистик воситаларни куйидаги олтига гуруҳини ажратиш мумкин:

- 1) to detect traces of papillary patterns (fingers and toes);
- 2) to identify micro-objects;
- 3) for search of metal objects;
- 4) for the detection of non-metallic traces and objects (corpses or parts thereof; traces of biological origin; dust particles of textile footwear; explosives, drugs and

chemicals; search for people, hiding places, etc.);

5) detection of audio, video or photographic images;

6) to determine the complex of traces.

Thus, the systematization of technical-forensic tools used in the examination of the scene, carried out in the course of research, has not only theoretical but also practical significance, which includes:

The system of technical forensic tools allows you to:

1) understand and determine the evidentiary or referral significance of the results of the use of technical forensic means in the examination of the scene;

2) use the whole set of technical and forensic tools in the scene inspection, depending on the functions performed by them and which help to increase the effectiveness of the investigative action;

3) refer to the investigator (official of the body conducting the pre-investigation investigation, inquiry officer or court), specialist in different (different) cases of technical-forensic means and their correct selection for each specific situation of the scene inspection;

4) identify ways to develop technical and forensic means of crime scene investigation and problems that need to be addressed;

5) targeted development of recommendations on the most optimal selection and use of technical and forensic tools in the examination of the scene, as well as to increase their opportunities for training in law schools.

References:

1. Gramovich G.I. Forensic technology: scientific, legal, methodological, organizational foundations. - Minsk, 2004. - pp. 40-58.
2. Exarhopulo A.A. Forensic science: textbook. - SPb., 2009 . P. 149.
3. Turchin D.A. Field forensic science and its practical application: scientific-practical. allowance. - M., 2006 . – P. 83.
4. Raxmankulov A.X. Mirazov D.M. Preliminary investigation: Textbook. - T.: Academy of the Ministry of Internal Affairs of the Republic of Uzbekistan, 2012. - P.210.
5. Mukhin G.N. Forensic science: textbook. allowance. - Minsk, 2009 . – P. 18.;
6. Bolychev V.G. The use of scientific and technical means in the procedural and tactical activities of the investigator: author. dis. Dsc: 12.00.09. - Voronezh, 2012. – P. 16.
7. Goncharenko V.I. Scientific and technical means in investigative practice. - Kiev, 1984 . – P.9.
8. Esengeldiev S.A. Forensic technology as a factor in the scientific support of

10.5281/zenodo.5717773

ISSN 2521-3261 (Online)/ ISSN 2521-3253 (Print)

DOI 10.37057/2521-3261 <https://journalofresearch.eu/9>

crime investigation: author. dis. Cand. jurid. Sciences: 12.00.09. - Almaty, 2008. – P. 10.

9. Kostrov A.I. Forensic science: textbook method. complex: at 2h. / A.I.Kostrov, V.V. Pechersky, A.V. Strakhov; Min. in-t control; under total. ed. A.I. Kostrova. - Minsk, 2006-2007. - Part 1: History and methodology of forensic science. Forensic technique and technology. - 2006. – P.50.

10. Obratsov V.A. Forensic science: models of means and technologies for solving crimes: a course of lectures. - M., 2004. - P.94.

11. Skorchenko P.T. Forensic science. Technical and forensic support of crime investigation: textbook. allowance. - M., 1999. - P. 12-13.

12. Shurukhnov N.G. Forensic science: definitions, schemes, tables, diagrams, recommendations: textbook. allowance. - M., 2008 . – P. 44.

13. Annotated dictionary of the Uzbek language. Letter / Editorial Board: E. Begmatov, A. Madvaliev, N. Mahkamov, T. Mirzaev (leader), N. Tokhiev, E. Umarov, D. Khudoiberganova, A. Hojiev. A.Madvaliev tahr.ost. - T.: “National Encyclopedia of Uzbekistan” State Scientific Publishing House. 2013. - P.527.

14. Timofeeva A.V. Kriminalisticheskoe modelirovanie neizvestnogo prestupnika po priznakam i svoystvam, otobrajaemym v sledax prestupleniya: avtoref. Dsc: 12.00.09. - Chelyabinsk, 2010. - P.15.

15. Criminology: A textbook for university students. Authors: F.Abdumajidov and others. - T.: “Adolat”, 2003. - P.47-48.

16. Yalyshev S.A. Some questions of the application of photogrammetry when examining the scene of the incident // Problems of intensification of crime investigation: interuniversity. Sat. scientific. tr. - Sverdlovsk, 1987. – P.92.

17. Forensic science: textbook. for university students // ed. A.N. Vasiliev. - 3rd ed. - M., 1980. – P. 25.

18. Anischenko I.A. Theory and practice of crime prevention using scientific and technical means and methods: author. dis. Dsc: 12.00.09. - Minsk, 2004. - P. 14.

19. Criminology: Textbook. / A.K. Zakurlaev, K.O. Maxmudov. - T .: Military-Technical Institute of the National Guard of the Republic of Uzbekistan, 2018. - P.57.

20. Obratsov V.A. Criminology: models of means and technologies of criminal prosecution: course lectures. - M., 2004. - P.94.

21. Andreev I.S. Criminology: ucheb. posobie. - Minsk, 1997. - P.29.