# CRIMINAL INVESTIGATION PROCEDURE ON THE SCENES AND WITHIN THE CONDITIONS OF MASSIVE ACCIDENTS

\*Žarković M. <sup>1</sup>, Mlađan D. <sup>1</sup>, Bjelovuk I. <sup>1</sup> Criminal Justice and Police Academy, Belgrade

Abstract: Numerous and various events that are causing harmful consequences require the performance of numerous activities at the location of an event, bearing in mind the importance of their nature, causes, actors and other questions that are important in order to solve such cases, as well as large information potential of the scene of the event. Besides the measures such as help provided to injured persons, prevention of further destructive influence of causes of an event, remedy of consequences, etc., the important part within the procedures made on a scene of an event is the criminal investigation procedures, i.e. crime scene investigation. Complexity of such a procedure, besides the large number of specific and special actions, is the most visible within the conditions of massive accidents - emergency situations. In this paper the emphasize is on those circumstances that are mutual for the largest number of events that are following up those massive destructions and that are endangering life and health of large number of persons, and that have to be taken into consideration during the crime scene investigation procedures at the place where the accident has occurred, as well as the most significant features within the treatment of events of such kind.

**Key words**: scene of an event (scene of crime), crime scene investigation, massive accident, emergency situations.

### 1. Introduction

The variety, diversity and complexity of events that cause harmful effects, the importance of answers to questions about the nature of specific events, causes, actors, and several other important issues for its clarification, and a great

<sup>\*</sup> corresponding author: Žarković M., E-mail: mizarko@yubc.net

informative potential of the place where the event occurred, requires taking a number of activities at that location. Besides the measures such as help provided to injured persons, prevention of further destructive influence of causes of an event, remedy of consequences, etc., the important part within the procedures made on a scene of an event is the criminal investigation procedures, i.e. crime scene investigation. This kind of procedures at the scene of an event assumes the existence of consequences, in the form of injury or endangerment of a property, which is the basis for suspicion that the case is in fact a criminal act. Often, with the measures and actions that are performed it will be determined that the event, which was the cause for suspicion that a criminal act was performed, has its cause in the force majeure, or it emanates from the case, so in connection with this event the question of criminal responsibility of its actors will not be raised. Of course, with this the importance of criminal investigation procedures performed on a scene of an event is not decreasing, but on the contrary.

The term place of criminal event, in the criminology literature, indicates the current place or the location where the incident occurred (Byrd, 1), e.g. the place on which the act was committed together with the entrance or exit (Weston & Weells, 1997). Referring to the institutions and concepts of criminal law, the place of the criminal event is defined as a place of execution, understood within the sense of criminal justice, and as any other site where you can find traces or items of some criminal act (Aleksić & Škulić, 2002), or as a place of execution of some actions and a place where there is an occurrence of consequences of an event that is the basis for the suspicion of a criminal act and any other place where there are items and traces suitable for proving criminal-justice relevant facts related to it. With the same meaning, within the criminal practitioners, the term scene of crime is much more in use.

Criminal and criminal-justice theory and practice are not divided when it comes to the significance of scene of crime investigation, which is understood as a system of measurements and actions with which, in accordance with legal and criminal regulations, and with the use of adequate scientific, professional and experienced methods and equipment we are able to secure, determine and document conditions on a place of some criminal event, and with that we directly determine the answers to the so-called golden questions of criminology, i.e. we are gathering evidence material and creating the facts' base that will enable all that. In the same time those gathered evidence must be acceptable, which before all means that they are found, secured, processed and stored in a professional manner (Weston & Weells, 1997).

Even though the activities within the crime scene investigation are various and complex (they mean the engagement of a large number of different subjects who are in charge of the performance of some of numerous tasks on complex conditions at some crime scene), it can be said that in the practice the basic protocol for crime scene investigation is built and present and all should respect it in all situations. Basically, this protocol means the continuous performance of the following activities: securing crime scene, gathering information on a crime scene and crime scene investigation. Speaking about the same issue some authors distinguish the definition, that is, the determination of a crime scene, its documentation and evidence gathering (Byrd, 1). Often, the scene is a spatial framework for the execution of not only these, but numerous other criminal and criminal-procedure actions: demonstration, that is, recognition of a crime scene, reconstruction of events, interview of witnesses, situational and other expertise, criminal experiment, search and temporary seizure of items.

Bearing in mind the concrete objectives of the procedures performed on a crime scene, it can be said that the crime scene investigation means: undertaken within the measures of first intervention, i.e. right after the knowledge about some event is acquired for which there is a suspicion of being a criminal act; a continuous action and systematic performance of actions with which the following shall be done: a) to determine if the event in question is in fact a criminal act, and if it is, to determine its type and to make precise classification, if that is possible; b) to gather, and if necessary to forward (as a warning or as a call for search) the data about the individual characteristics of a perpetrator, possible accomplices, vehicles that they used, how and in which direction they left, etc.; c) to find, identify and interview victims, eyewitnesses and other persons who have the knowledge that is important for the full clarification of the specific event and then to document their statements; d) to secure crime scene, to look for, to find, to mark, to analyze, to interpret, to protect the items and traces from changes, disappearance, damage or contamination, and then to preserve the items and traces for which it is clear or it is assumed that those are the evidence; e) to determine the way and means used for the performance of that criminal act, as well as its nature and its consequences; f) to register the methods and means used for the search, development and for securing of evidence, i.e. the data about gathered evidence; g) to design investigation documentation. This procedure phase is, by some authors, called "preliminary investigation" and it is determined as the first phase of general investigation (Weston & Weells, 1997).

Because of the complexity and variety of concrete events, the mentioned phases of the protocol for crime scene investigation are mutually intertwined in different modalities. Despite this, the protocol is essentially, the same procedure for the crime scene investigation of any criminal act (Baldwin), from the most simple case to the most complex one, and designed approach to the implementation of the crime scene investigation means a series of assumptions,

responsibilities and procedures within the work performance of competent subjects: fast and uncompromising act upon the knowledge of the event; safe approach to the scene and its protection; achieving the preliminary determination of the crime scene boundaries; marking of the possible point of arrival/escape of the perpetrator from the crime scene; determination of the degree of crime scene protection that was done till that moment; protection and security of a crime scene; take control over the situation at the crime scene; establishment and preservation of official and emotional control on a crime scene; determination of the identity of persons who are present at the crime scene; gathering information from the persons present at the crime scene and who have some knowledge about relevant circumstances; prevention of unauthorized entrance to the area of a crime scene; registering data about the identity and reason of the entrance, i.e. exit of the person from the area of a crime scene; evaluation of possibilities for collection of material evidence; complete knowledge and correct usage of all necessary resources; use of adequate methods and techniques in the detection of evidence; thorough and lawful search conducted at a crime scene; detection of all relevant evidence with the full attention paid on discarded or hidden and planted evidence; marking, collecting and documenting material evidence; proper handling and packaging of evidence; proper documentation about the crime scene in general and particularly about important details; preparing and making the narrative description about the crime scene; photographing crime scene; preparation and design of sketches of a crime scene; selection of competent specialists - facilities for the analysis of evidence; implementation of the final crime scene review; leaving the crime scene; compiling extensive notes on all the observation and all that was done. (Byrd, 1; Crime Scene Response Guidelines, Organization and Procedures for Search Operations; Weston & Weells, 1997).

To denote different types of events that are accompanied by severe destructions, significant material damage, losses of human lives, or enhanced risks, members of different professions and services, as well as volunteers who participate in planning the defense from the existing dangers, are using different terms. Each term has distinctive associations. Persons working within the emergency intervention services prefer to use the term "large or great or massive accident". Distinguishing it from the term accident, the term incident points out that that is an "avoid accident".

Within the manual of the Secretariat for civil emergencies, from the Office of the Government of the United Kingdom, dedicated to dealing with disasters, it is accepted to use the term "massive accident" as a general term that can be applied to a large number of destructive changes, which are either on their beginning or they present disasters or crisis with current influence. For the purposes of this manual a large accident means every event or circumstance (which

happens with or without warning) that causes or threatens to cause death or injury cases, destruction of communities or causes damage to properties or surroundings with such strength that the consequences cannot be rehabilitated by the emergency intervention services, local authorities and other agencies and organizations as part of their normal everyday activities.

In other words, a large accident is every emergency situation which requires undertaking of specific activities by one or more emergency intervention services, and which generally includes the participation, directly or indirectly, of a large number of people (rescue and transport of a large number of victims: combined involvement of large police resources; fire-rescue and emergency medical services; mobilization and organization of intervention services and support services). Thus, for example, London coordination panel for emergency (LESLP) was formed in 1973 and it consists of the representatives of the Metropolitan Police Service, the City of London Police, British Traffic Police, London Fire Brigade, London medical emergency services and local authorities. There are also the representatives from London Port Authority (PLA), Naval Coastal Guard, the RAF, military and voluntary sector. If necessary, LESLP can invite representatives of other agencies to join the group, depending on the nature and type of incidents. Moreover, something that represents a big incident for one service does not have to be the same for another – for example, there are possible cases in which some services will be engaged only by putting them on standby (Office of the Government of the United Kingdom, the Secretariat for Civil Emergency Situations, 2001).

In the draft of the law on emergency situations and civil protection of the Republic of Serbia in June 2009, an emergency situation is defined as a situation in which the risks and threats or the consequences of natural disasters and other large accidents, special events and risks for population, environment and material goods are of such scope and intensity that their occurrence or consequences cannot be prevented or eliminated by regular activities of the competent authorities and services, so that is why for their reduction and elimination it is necessary to use special measures, forces and resources with enhanced working mode. Emergency situations, according to this law, are as well the consequences of war destruction and terrorism.

Characteristic elements, based on which the emergency situation (ES) can be classified are: the source and nature of emergency situation; spreading rate; the scope of emergency situation. Natural sources are dangerous natural phenomena; technical and technological breakdown and dangerous technical and technological events – (incidents, accidents); war – modern means of warfare; biological and social – particularly dangerous or widespread infectious diseases of people, domestic animals or plants.

In accordance with the spreading speed ES can be explosive, violent or moderate and slow (long). In the explosive, violent we could classify those that are caused by earthquakes, explosions, traffic accidents, destruction of buildings and facilities, as most of war conflicts. Strongly developed are also those ES caused by fires, catastrophic floods, accidents which occur during the discharge of hazardous chemical substances and use chemical weapons. Opposite of that, ES that develops in a moderate and slow way is associated with environmental pollution. Emergency situation caused by drought, soil contamination, breakdowns in industrial plants for purification are called "crawling" disasters.

In accordance with the scope ES can be of local, regional, national and global character. Emergency situations of the smallest scope, i.e. of the local character are events that do not spread beyond the borders of a settlement, company or facility. Endangering factors of regional, national and global crisis situations are affecting the entire region, country and planet Earth as a whole.

It can be considered that large accidents – emergency situations have four phases: initial response; consolidation phase; recovery phase and the establishment of normal conditions. Determination of the causes of accidents, including a conversation with persons who have intervened, can be done throughout this structure (LESLP, 2007). Terrorist acts in its essence and consequence also represent emergency situations.

# 2. First measures and risk assessment of the criminal procedures at a crime scene

A general rule is that the actions done by the police officer who arrives first to the crime scene, as well as the actions done by any other authorized official involved in its processing, should not be impulsive, rash and uncontrolled, but designed, calm and systematic. In some cases, especially in the case of massive accidents, that is not easily achieved, because with the basic objective, securing the scene, some other objectives must be harmonized, and before all the following: to prevent further spread of harmful consequences, i.e. to prevent occurrence of new damage (for example, prevention of secondary explosions and casualties within gathered curious people or members of different services who are performing crime scene investigation and who are providing aid) to help injured persons, to regulate the movement of people and vehicles in the narrow and broad area of that event, enabling the work of a variety of rescue services, prevention of removal or destruction of items and traces that are present at a crime scene and special protection of certain items and traces, arrest or direct chase of the perpetrator who was caught in the act or near the place of execution.

Specific issues of the processing of certain types of events can be recognized in some legal provisions. Thus, for example, the Law on traffic security (RS Official Gazette no. 41/09) provides the obligations for an authorized official who is undertaking the inspection to organize the list of assets that remain at a crime scene after the person who was involved in a car accident got killed or was seriously injured and to secure the same assets till the moment when the assets are taken over (Article 176). In addition, if after the accident, the driver or vehicle's owner, does not remove from the road, without any delay, the vehicle, cargo, items or other material scattered on the road, territorially competent organizational unit of the Ministry of the Interior shall order the road management to remove the vehicle, cargo, items or other material from the road to some safe place at the expense of the owner (Article 177).

The complexity and delicacy of work oncrime scene investigation is reflected in the necessity of meeting with extremely traumatic situations that follow massive accidents. Among the most traumatic, of course, are those that result in the death of a person where that is particularly emphasized in the case of a sudden death of a child. A sudden loss of young and innocent life, devastating for the parents and close family of the child, does not leave indifferent even the authorized officials who work on the investigation of such death case. Although the authorized officials may have learned to channel the energy caused by some tragic event towards the determination of the truth, it is usually not possible to fully realize that (Byrd, 2). Stressing the importance of law enforcement measures, some authors emphasize that police officers who first arrive at the crime scene which resulted in a number of heavily injured and fatally injured persons they must resist the temptation to become personally involved in rescue operations. Their main function in this phase is to obtain and submit accurate information in order to assess and implement measures for the response to such disaster (International Criminal Police [Interpol], 1997).

Authorized officials who come to some crime scene can in any moment find themselves in potentially risky or dangerous situations. These situations or circumstances can sometimes be seen without any major problems, and sometimes intuitively but not at the first sight. Visible forms of risk and danger speak for themselves and the training and experience develop intuitive form of recognition. The crime scene that carries the risk of infection, or its parts where those risks are present should be specially marked by tape, flags or other signs that warn about the risk zone, or item, or traces (for example, do not approach there is the risk of infection, radioactive, etc.).

At massive accidents – ES, with a variety of risks of physical, chemical and biological nature, considerable attention should be given to the risks of radioactive radiation. Risks that are not easily noticeable certainly include viruses and

infectious substances, which occur especially in situations of contact with the remnants of a human body or contact with human blood and tissue in the area of injury or death. Diseases that are threatening the most from some crime scene are hepatitis B, tuberculosis and herpes. Besides those there are also other such as: viral hemorrhagic fever, Creutzfeldt-Jakob disease (mad cow disease), hepatitis A and E (carried through the feces), hepatitis B, C, D and G (serum hepatitis) for the transmission of which a direct contact is required (Czarnecki).

Experience has shown that the personal safety of the authorized officials and safety of other persons present at the crime scene is a priority, and respect of the fact about the existence of numerous risks of injury and infection in the area of massive accidents requires that, besides the definition of the necessary human and technical resources, before entering the area of a crime scene, one must provide protective equipment for the authorized officials who are engaged in investigation. Practice has shown that in most cases, when it comes to protective equipment, it is necessary to use rubber gloves, protective suits, protective shoe covers, aprons, face masks, protection for the eyes and face. Basically, there are four levels of protective clothing. The lowest level, coveralls without respirators, are used to protect a person from the mildest inconvenience of contamination, while the highest level involves wearing fully enclosed suits under which there is a breathing device. Other suits protect the skin, respiratory system and eyes (Byrd, 3). Efficient work with the use of suits (which are not especially flexible) and other equipment of the highest level of protection presupposes previous practical competence of the authorized officials developed through training and experience. Only then, therefore, in conditions of complete knowledge of the equipment that is at their disposal, it is possible to work in it, where every movement must be slow and cautious (Czarnecki).

The efficiency of undertaken protection measures includes the consistency in the application of properly selected equipment and awareness of existing risks and possible ways of contamination. This further means that wearing protective clothing, shoes, eye protection, gloves, etc., will not be enough for protection, if the contaminated pen, pencil or marker, used at the crime scene are placed behind the ears, if the caps from them are removed with the teeth, that is, if means for writing the notes, made and contaminated at the scene are brought to the official premises and thus become a source of infection. In the case of engagement in a biologically-risky situation, the authorized official, who is searching the place, should be alowed to say all his/her observations out loud to some other authorized official who does not have a direct contact with the items or substances that are the potential sources of infection. All items used for writing, sound recording and video taping should be used safely, and before leaving the crime scene, those items should be treated in the same way as with

the rubber gloves and other used biologically-risky equipment, i.e. those items should be disinfected on the spot, then disposed of in protective packaging and then disinfected or destroyed. When it comes to clothing used in place of some criminal event, that clothes should be separated from other clothes, till the contaminated clothes are clean. Those clothes will be decontaminated by washing them in water with bleach or detergent at a temperature of 135°C or more in duration of 10 minutes (Czarnecki).

Protection from risk means clear marking and decontamination of external parts of boxes in which the evidence from biologically-risky crime scene are packed, especially those that contain risky evidence. In this way, an authorized official who will later on get in contact with this kind of evidence shall be protected. Measures of precautions and protection should be consistently applied in laboratories where hazardous materials collected on a crime scene are delivered (Byrd, 3).

Specific problems and difficulties in the implementation of criminal investigation, and within that the crime scene investigation, are a link with the tragic events that had resulted in great loss of life and enormous material damage (accidents in air, roads, rails and naval traffic; accidents in mines; explosions; fires, etc.). Solutions for arising situations and acting in this, especially complex conditions involve not only teamwork but also the engagement of a large number of different teams. Cooperation between the teams, flexibility and ability of adjustment of engaged persons, are of crucial importance for the success of overall efforts to determine and repair the situation arising at the crime scene. Pursuant to what was said, behavior at the crime scene includes familiarization with available resources, establishment of management structure and system setup. One of the possible forms of management organization at the crime scene implies that the organization consists of: an officer responsible for personnel matters (that officer is located at the accident site and decides on the necessary manpower for the operation); an officer responsible for equipment and supplies (that officer should provide supplies and other field equipment and resources necessary for the safe and quick way to finish the operation); an officer responsible for the acquisition of food, water and other needed goods (that officer takes care that the manpower get those supplies); an officer in charge of the facilities (that officer should assign seats suitable for certain teams and services involved in rescue, as well as the place for nourishment, place for throwing litter, toilets, etc.); a liaison officer with the other teams; an operation officer for the allocation and coordination of operations; an officer in charge of public relations - communicates with the media that report about these types of events (Byrd, 4).

Delicate work on the sites of tragic events is the consequence of the fact that the work with the deceased, survivors and relatives often leads to unusually strong and unexpected pressures on the mind of engaged authorized officials.

Anyone who is involved in the work on the sites of massive accidents will experience stress to some degree. Vital issue for the success in overcoming the problem of stress is previously conducted training, quality preparation and properly informed personnel who are engaged. Equal importance has the information about individual opinions, reactions and conclusions regarding the occurrence, manifestations and consequences of stress. The collection, analysis and assessment of information on cases of stress should be performed by adequately educated and trained staff. Generally speaking, the importance of the recognition of stress as normal reactions to abnormal situations should not be underestimated. That is because its negative phenomenon, at some of the participants who have worked at a crime scene, may affect in a very harmful manner not only their mental health but also the success of the activities of the entire team. For easier preservation of emotional stability of the engaged personnel and control of situation, dealing with the feelings that are inevitably caused by the tragic events with a large number of fatalities and seriously injured persons, it is desirable to engage psychologists together with other members of the team for crime scene investigation. Stress can be reduced with the help of appropriate techniques, such as holidays, rotation of personnel, light exercises, etc. Selection of the most appropriate method depends on many circumstances and it must be made by the engaged psychologists (Interpol, 1997).

Considering that the tragic events which result in human casualties and great material destruction, require implementation of a long time, sometimes multi-day crime scene investigation, almost always in such situations, especially in localities outside of settlements (for example, in the case of aircraft in rough terrain - mountain range, swamps, etc.) numerous other problems are appearing: for example, the problem of transportation of authorized officials and other necessary personnel to and from the scene of an event (for this purpose, when conditions permit, it is possible to use helicopters); supplies of electricity for numerous devices (for this purpose it is necessary to provide electro generators); organization setup, storage and use computers and telecommunication equipment; needs for water, food, sleep, etc.; conducting physiological and hygienic needs for engaged personnel; waste disposal, etc. – it is necessary to set up more tents with a different purpose, prefabricated toilets, showers, etc. (Byrd, 4).

## 3. Securing crime scene

As part of the criminal investigation, securing of the crime scene begins with the arrival of the first authorized official to the site and it lasts until the moment when that site is left without police supervision. As a rule, uniformed police officers are those who are arriving first to the crime scene and then se-

cure it. The very process of securing the crime scene includes a series of interrelated activities: the determination of the width of the crime scene area, its marking, treatment of present persons, disabling effects of different disturbing factors and special protection of certain items and traces.

When defining the width of the area of some criminal event police officer acknowledges, before all, the spatial diffusion of visible items and traces of that event and the statements of present persons about the circumstances that are relevant for the specific situation. A very important prerequisite of successful work of an authorized official or a police officer and definition of crime scene boundaries is represented by his/her full intellectual engagement, analytical thinking and the possession of high criminal and other, in a given situation, necessary specialized knowledge and experience that enables high-quality observations, processing and evaluation of existing information, and thus the precise mental reconstruction of event's flow, on which the investigation is being made, including the definition of the spatial outline of that event. If the area of a crime scene is defined on too narrow an area, which does not include the routes that perpetrator used for arrival and departure to the crime scene, this will result in traceology deficit. From criminal practice it is known, that right on those places, attention of the perpetrator is becoming week, on those places he/she rejects, loses or forgets certain items, leaving many traces that may allow his/her direct or indirect identification (Modly, 1999).

Areas where the items and traces are spreading and that should be found and secured during the investigation of massive accidents can be so large that it can hardly be imagined. Thus, for example in the case when an aircraft crashes from the high altitude, especially if there was a previous explosion in that aircraft in the air, the area where the items and traces are dispersed (parts of the wreckage, bodies and property of dead persons) can cover several square kilometers, geographically very diverse, which is not connected with roads and with hardly accessible terrain (Interpol, 1997). On such occasions, as well as in other similar situations, photos made from the air can be of great help in defining the width of the crime scene area. If the items and traces are scattered on rough terrain, it is necessary to divide the whole area into sectors based on natural or artificial features, such as river banks, fence rows, field roads, cliffs or buildings. These sectors can be further divided into smaller areas within which it is easier to work. Then a chart is prepared that corresponds to each sector, which clearly shows the coordinate system or the main fixed points, and a certain number of copies should be made in order to ensure that each of the places will be adequately investigated and that all relevant findings are precisely recorded.

The protection of the crime scene and items at it from theft, fire, explosion, flammable and other harmful substances (with the ban on entering the area to all

unauthorized persons) also means the end or initiation of interrupting supply or evaporation of dangerous substances, prevention of its further spreading and the end or initiation of electricity, etc. In such situations the boundaries of the crime scene area must be even wider and they should include the space where those poured liquids as well as other harmful substances are spreading, and it should also include the other potentially dangerous zones.

For easier managing of the situation in the area of massive accidents, it is recommended to set up three rows of protective barriers, and consequently, the differentiation between the three zones at the location where the event took place. Wider zone (external outline, external barricade) is defined and established as border and location that is wider than the crime scene and that is done in order to protect the site from harmful impacts. External barricade covers as much space as necessary in order to enable the prevention of access of undesirable persons and to provide safe presence of observers, media and official support staff, to provide space for the retention of the participants of that events, witnesses and potential witnesses, and to create conditions for the undisturbed and safe work of investigative team (Gavrilović, 1981). As for other barriers (zones), one indicates and isolates the command post (in a safe space, close to site), and the other indicates center or just the place where the event occurred and on which there are relevant items and traces (Byrd, 1). Command post, i.e. safe space - a quiet area, should be established, especially if the crime scene encompasses a broader space, or, however, more mutually (more or less) remote locations, and that post should be on the location that is considered to be the main one - the central location. That space can be used for: leaving the necessary equipment; stationary for personnel when they have a break during the work; as a center for collecting and processing data, conducting the necessary consultations with engaged personnel, making decisions and giving instructions to other participants in the implementation of the criminal investigation on the main site, i.e. coordination of work of teams at other locations that are included in the same criminal investigation; as a communication center; place for press conferences, etc.

One of the reasons for establishing a command post, when it comes to crime scene investigation of the places of massive accidents (requires more time engagement of the larger number of authorized officials), lies in the fact that consumption of food, drinks, smoking and unnecessary retention within the scene, with the danger for the evidence, can be detrimental to the authorized officials who, since they come in contact with different, often very harmful substances and if those substances get into their organism (through drinks, food and by hands) can seriously damage their health. For purposes of carrying out the numerous activities and the compulsory presence of a larger number of persons,

those involved in crime scene investigation, as well as the other persons, it is best to place a command post outside the narrow location of the crime scene area. That post can sometimes be placed not only outside the area that is determined as the crime scene area but on a more distant place in relation to that area (of course with the existence of high-quality communication with the authorized officials who are directly involved in crime scene investigation). That is why in the function of the command post one can find a vehicle, tent, some local office, hotel room, etc. (Byrd, 1). Marking of defined boundaries of a crime scene in a given environment is done with the use of suitable objects and items, with the placement of authorized officials and/or vehicles, or with the placement of provisional means and/or means that are made for such purposes (ropes, tapes, special - regular or rotating lamps barriers, skittles), with clear messages about the police presence (stop police, do not approach - investigation in progress, etc.).

In the conditions of the compulsory presence of a larger number of authorized officials at the crime scene, the problem of its protection from uncontrolled movements and activities of other present officers is a problem that occurs on a regular basis. Besides the obvious psychological barrier (Bojanić & Korajlić, 2003) with the placement of police officers, the prevention of entrance for unauthorized persons that could move, damage or destroy evidence shall be made physically as well. It is particularly important to prevent changes that would diminish the significance of certain items and traces or that could contributed to their incorrect analysis, and thus the wrong interpretation of the event in general (Lipovac, 2000). As one of the solutions, which the authorized officials will use to deter unnecessary entry into the crime scene area, is the determination of only one entrance/exit at the scene and placement of a police officer at that place with the task to record the details of all persons who enter or leave the crime scene area (Interpol, 1997). If necessary, that police officer shall warn persons who enter the crime scene area that they could damage or even destroy some of relevant items or traces, and to inform them that the reason their names are recorded is that in case of a need police may ask them to give their fingerprints, shoeprints, textile fibers, blood, saliva, hair, etc. This will sometimes discourage the curious from among the authorized officials whose presence at the crime scene is not within the function of criminal investigation. The police officer appointed to an established entrance, as well as every other police officer who is engaged in securing the crime scene shall prevent other uninvited persons from entering the protected area.

The practice has shown that human curiosity, stubbornness, and sometimes stupidity and primitivism are much more "productive" in the final destruction of the holders of important information than the usual "disturbing", informative - destructive factors, such as: atmospheric conditions, which generally fall within

the domain of God or the coincidence (Škulić, 1998). Explicitly forbidding the access to the uninvited persons, even if those persons are their immediate supervisor or officials from various levels of government and management, both vertically and horizontally, with their own example the managers of crime scene investigators will influence other authorized officials who are engaged at the crime scene (Garisson, 1994). If there is a need of entrance for some unofficial or official persons who do not participate in crime scene investigation, an authorized official should be determined who will direct them and who will monitor their movements and behavior, and be responsible for the preservation and security of the current state of the part of the crime scene on which those persons had access. This will prevent accidental or intentional damage, destruction or an alteration of the existing material evidence as well as the production of new material evidence (Schiro).

In situations where it is necessary, before the arrival of crime scene investigators, to enter the crime scene area (for example, to assist the injured person found at the scene, his/her transport to the health facilities, to cover the body of a deceased person, or to take other measures aimed at the immediate protection of human life and property), the authorized official person who performs the security, or guidance and supervision duty over the conduct of persons who were, for some justifiable reason, allowed to enter the crime scene area, must do everything to avoid unnecessary changes in the current situation, or damage and destruction of items and traces that can be used as evidence. In closed spaces particular attention should be paid to the floor as the place where most evidence can be found and which are, considering the location, exposed to the highest risk of damage and destruction (Schiro).

Besides all that was mentioned, the obligations of an authorized official is to remember, i.e. to highlight and secure the changes that were caused in an adequate manner (for example, by photographic or video recording of the found situation, by marking the found and place of transported person or corpse, the position of front and rear axles of vehicle, etc.). In order to prevent accidental destruction of especially important and not so easily observable items and traces, some of them should be clearly marked already in this phase of investigation - marked or otherwise protected (Lipovac, 2000). If there is danger of destruction of certain evidence, or the occurrence of changes that may reduce the evidentiary significance of certain items and traces because of rain, snow, wind, strong sun, the uncontrolled spread of water, fire, gas, etc., the authorized official who is securing the crime scene shall try to make special protection of such items or traces in the place where they were found, taking into account the already mentioned ways of how the persons can enter the crime scene (Vodinelić, 1984). Authorized officials who are arriving later to the crime scene as

managers of the entire crime scene investigation or some of its parts must be informed about all that was noticed and undertaken till that moment, in the spatial and in functional sense as well.

Harmonization of different investigative teams, formed within a single crime scene investigation team, and in particular, different crime scene investigation teams formed for the investigation of one massive accident, implies the existence of a coordinator of all crime scene activities, a coordinator of criminal conduct, the formation of the group which consists of the managers of all teams formed for the work on crime scene investigation or its individual segments, and accurate recording of details about all members of the teams and their specific responsibilities (Interpol, 1997). In such situations, and in the search of crime scene area in order to recognize, that is to find the evidence, as well as labeling, development, securing and packaging of evidence, access should be extremely professional, thoughtful and patient, while, practical actions of finding and recognition of evidence should be followed by adequate documentation of the situation, the conditions and position in which they were found (with the careful making of notes, as accurate as possible, and with precise measuring of the essential elements and making the high quality and complete photo documentation). Even though one can find hundreds of different items and traces at a crime scene, all of those should be processed and analyzed. The question is, however, whether each individual item or trace can and should be marked, and then secured within the crime scene investigation documentation. That would be very laborious, time consuming and not always fruitful work. Thus, already in this investigation stage, the manager of the crime scene investigation and the expert for processing of traces are necessarily deciding about the issue of what will be important for a comprehensive and reliable analysis of accidents and they are selecting the items and traces with which the most important elements of the current situation will be documented and they ignore those that do not provide any new information about the accident (Lipovac, 2000, INTERPOL, 1997). Thus, for example, when marking the bodies of those who were killed in the criminal event that resulted with a larger number of dead persons (severe traffic accident in passenger traffic), they will use the pegs with boards on which there are marks (numbers) which should be placed in/on the ground next to the body, and do not move them, even after the removal of the body. Bags, in which the bodies are transported, should also be marked with the same labels (numbers), and assigned label will remain the reference for the body and it will remain with the body during the whole procedure of identification. A similar, but separate system of numbering must be applied when it comes to material evidence and property of victims (Interpol, 1997).

#### 4. Conclusion

Aware of the fact that the characteristics of procedures (work and activities) at the scene of some massive accident, i.e. of extraordinary situations are numerous, and that only some of them, in terms of restrictions and the title of a defined paper content, are presented on this occasion, the authors recognize the professional obligation to take specific coordinated behavior at the scene of some ES as those that are connected to the crime scene investigation, as well as those that involve the engagement of other agencies and individuals of different specialties, and to discuss about all that in the new scientific and professional papers. By the logic of things, this means engagement, joint work and joint authorship with experts of various specialties.

#### 5. References

- Aleksić, Ž. & Škulić, M. (2002). *Kriminalistika*. Beograd. Baldwin, H. B. *Crime Scene Processing Protocol*, Retrieved July 14, 2009, from 2. http://www.feinc.net/cs-proc.htm
- Bojanić, N. & Korajlić, N. (2003). Značaj osiguranja mjesta događaja radi obezbjeđenja materijala za vještačenje. Expertus forensis, broj 1, sveska 2, Podgorica. str. 227-236
- Byrd, M. (2). Crash, Retrieved July 14, 2009, from http://www.crime-sceneinvestigator.net
- Byrd, M. (4). Disaster Management, Lost Innocents, Retrieved July 14, 2009, from http://www.crime-scene-investigator.net.
- Byrd, M. (1). Duty Description for the Crime Scene Investigator, Retrieved July 14, 2009, from http://www.crime-scene-investigator.net
- 7. Byrd M. (3). Hazards and Crime Scene, Retrieved July 14, 2009, from http://www.crime-scene-investigator.net
- Crime Scene Response Guidelines, Organization and Procedures for Search Operations, Training's workbook for the "Forensic Technology for Law Enforcement", Retrieved July 14, 2009, from http://www.crime-scene-investigator.net
- Czarnecki, E. R. Safety Revisited, Retrieved July 14 2009, http://www.geocities.com/cfpdlab/safetyczar.html.
- 10. International criminal police INTERPOL. (1997). Disaster victim identification -
- 11. Fox, R.H., Cunningham, C. L. (1997). Priručnik za pretragu mjesta događaja i
- prikupljanje fizičkih dokaza. Garisson, D.H. (1994). Protecting the Crime Scene, FBI Law Enforcement Bulletin, Retrieved July 14, 2009, from http://www.crimeandclues.com/protect.htm.
- 13. Gavrilović, P. (1981). Obrada saobraćajne nezgode. Beograd.
- 14. Lipovac, K. (2000). Uviđaj saobraćajnih nezgoda, elementi saobraćajne trasologije. Beograd.
- 15. Kabinet Vlade Ujedinjenog Kraljevstva, Sekreterijat za civilne vanredne situacije, (2001). Suočavanje sa katastrofama. London.

- 16. Londonski koordinacioni panel za hitne intervencije. (2007). Priručnik o procedurama u slučaju velikih akcidenata. Norwich.
- 17. Modly, D. (1999). Metodika uviđaja. Sarajevo.
- 18. Schiro, G. Protecting the Crime Scene, Retrieved July 14, 2009, from www.crimescene-investigator.net.
  19. Škulić, M. (1998). *Uviđaj i kriminalističke verzije*. Beograd.
- 20. Vodinelić, V. (1984). Kriminalistika. Beograd.
- 21. Weston, P. B., & Weells, K. M. (1997). *Criminal investigation: basic perspectives*. New Jersey.

# KRIMINALISTIČKO POSTUPANJE NA MESTU DOGAĐAJA U USLOVIMA VELIKIH AKCIDENATA

#### Rezime

Brojni i raznovrsni događaji koji uzrokuju štetne posledice, važnost odgovora o njihovoj prirodi, uzrocima, akterima i nizu drugih pitanja značajnih za njihovo rasvetljavanje, i veliki informativni potencijal mesta događanja, nalažu preduzimanje brojnih aktivnosti na toj lokaciji. Uz mere, kao što su pružanje pomoći povređenim licima, sprečavanje daljeg štetnog dejstva uzročnika događaja, saniranje posledica i sl., značajno mesto u postupanju na mestu događaja ima i kriminalističko postupanje, to jest kriminalistička obrada mesta događaja. Složenost postupanja, uz brojne specifičnosti naročito dolazi do izražaja u uslovima velikih akcidenata – vanrednih situacija. U ovom radu pažnja će biti posvećena onim okolnostima koje su zajedničke najvećem broju događaja koje prate masovna razaranja i opasnost po život i zdravlje većeg broja ljudi, a koje se moraju uvažavati i prilikom kriminalističke obrade mesta na kom se tragični događaj desio, kao i najznačajnijim osobenostima u postupanju povodom događaje ove vrste.

### **Summary**

Numerous and various events that are causing harmful consequences require the performance of numerous activities at the location of an event, bearing in mind the importance of their nature, causes, actors and other questions that are important in order to solve such cases, as well as large information potential of the scene of the event. Besides the measures such as help provided to injured persons, prevention of further destructive influence of causes of an event, remedy of consequences, etc., the important part within the procedures made on a scene of an event is the criminal investigation proce-

NBP • Journal of Criminalistics and Law [201]

dures, i.e. crime scene investigation. Complexity of such a procedure, besides the large number of specific and special actions, is the most visible within the conditions of massive accidents – emergency situations. In this paper the emphasize is on those circumstances that are mutual for the largest number of events that are following up those massive destructions and that are endangering life and health of large number of persons, and that have to be taken into consideration during the crime scene investigation procedures at the place where the accident has occurred, as well as the most significant features within the treatment of events of such kind.