

UDC: 377.081:37.918.43(086)

[https://doi.org/10.32689/2617-2224-2020-3\(23\)-121-137](https://doi.org/10.32689/2617-2224-2020-3(23)-121-137)

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PROFESSIONAL DEVELOPMENT OF SENIOR EXECUTIVES OF STATE EXECUTIVE AUTHORITIES INVOLVED IN THE ELIMINATION OF THE CONSEQUENCES OF AN AVIATION ACCIDENT

Abstract. The analysis of the complex of measures aimed at identifying aircraft that were or are in distress in the area of aviation search and rescue of Ukraine and providing well-timed assistance to the victims showed that the staff of the executive authorities, management bodies of search and rescue operations and search and rescue services are not always timely and not sufficiently confident in making decisions on the site of emergency operations, not professional enough to conduct search and rescue (SAR) operations, not accurate to organise the interaction of forces that are engaged in aviation search and rescue and also divisions directly responsible for SAR.

In order to specify the shortcomings in the training of personnel included in all aviation search and rescue authorities, the authors of the article created an information base of computer-oriented situational procedures for the list of functions defined in Section 3 (p. 2) of the Aviation Search and Rescue Rules in Ukraine (Order of the Ministry of Internal Affairs of Ukraine dated 16.03.2015

№ 279) for all participants of the operation of aviation search and rescue. According to the list of these procedures, they were experimentally assigned to working them out at specially organized staff trainings with staff of MASRCC and ASSRC, governing bodies at the airfields, operational coordination centres of the HD (U) SES in the regions. The staff of state executive bodies failed to take part in the experiment.

The results of the experiment, using the methodology of assessing the level of competence, allowed to analytically determine the integrated indicator of professional competence in the performance of the defined according to the post functions of each category of personnel, whose activity is related in one way or another, to the functioning of the aviation search and rescue system and direct search and rescue operations.

For objective reasons, the results of the study cannot be considered to be sufficiently correct due to a small number of respondents who participated in the experimental studies, but the findings were significantly correlated with the results of the ongoing review conducted in 2019 by the Aviation and Aviation Search and Rescue Department of the SES on the issues of search and rescue activities of ASAR personnel in response to aviation-related emergencies. But the integrated approach to determining the metrics allowed us to establish the trends quite certainly. The main essence of these trends is the imbalance of the curricula in the context of the ratio of fundamental and applied preparation, forms and types of theoretical and practical trainings and ignoring the possibilities of optimizing the content component on the basis of unification of educational, professional and certification processes.

The authors have convincingly proved the necessity of organizing and conducting the training of specialists of aviation search and rescue system entities (executive authorities, the SES, the Armed Forces of Ukraine, the National Guard, the National Police, the State Border Guard Service) involved in conducting aviation search and rescue operations on the basis of innovative organizational-pedagogical concepts (modular-competence, subject-activity and meta-subject approaches) as well as domestic and foreign experience.

Keywords: executive authorities, aviation accident, innovative didactics.

ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ КЕРІВНИХ КАДРІВ ДЕРЖАВНИХ ОРГАНІВ ВИКОНАВЧОЇ ВЛАДИ, ЩО ЗАЛУЧАЮТЬСЯ ДО ЛІКВІДАЦІЇ НАСЛІДКІВ НАДЗВИЧАЙНОЇ СИТУАЦІЇ, ПОВ'ЯЗАНОЇ З АВІАЦІЙНОЮ ПОДІЄЮ

Анотація. Аналіз комплексу заходів, спрямованих на виявлення повітряних суден, які зазнали або зазнають лиха в авіаційному районі пошуку і рятування України та надання своєчасної допомоги потерпілим показав, що персонал органів виконавчої влади, органів управління пошуково-рятувальними роботами та пошуково-рятувальні служби не завжди своєчасно та не достатньо впевнено приймають рішення на місці проведення аварійно-рятувальних робіт, недостатньо професійно проводять пошуково-рятувальні

роботи (ПРР), не чітко організовується взаємодія сил, які залучаються до авіаційного пошуку і рятування, а також підрозділів, що безпосередньо проводять ПРР.

З метою конкретизації недоліків у підготовці персоналу, що входять до всіх органів управління з авіаційного пошуку і рятування, авторами статті було створено інформаційну базу комп'ютерно орієнтованих ситуативних процедур за переліком функцій, визначених у Розділі 3 (п. 2) Правил авіаційного пошуку і рятування в Україні (Наказ МВД України від 16.03.2015 № 279) для усіх учасників операції з авіаційного пошуку і рятування. За переліком зазначених процедур експериментально було поставлено їх відпрацювання на спеціально організованих штабних тренуваннях з персоналом ГАКЦПР і АДЦПР, органів управління на аеродромах, оперативного-координаційних центрів ГУ (У) ДСНС в областях. Долучити до експерименту персонал державних органів виконавчої влади не вдалося.

На основі отриманих результатів експерименту, з використанням методики оцінки рівня компетентності, дало можливість аналітично визначити інтегрований показник професійної компетентності щодо виконання визначених за посадою функцій кожною категорією персоналу, діяльність якого пов'язана тією чи іншою мірою з функціонуванням системи авіаційного пошуку і рятування та безпосереднім проведенням пошуково-рятувальних робіт.

З об'єктивних причин результати дослідження не можна вважати достатньо коректними через малу кількість респондентів, що брали участь в експериментальних дослідженнях, але отримані висновки суттєво корелювалися з результатами поточної перевірки, проведеної в 2019 році Управлінням авіації та авіаційного пошуку і рятування ДСНС з питань пошуково-рятувальних дій персоналу АПР під час реагування на надзвичайні ситуації, пов'язані з авіаційними подіями. Однак запроваджений інтеграційний підхід щодо визначення оціночних показників дозволив досить вірогідно встановити тенденції, основною сутністю яких є незбалансованість навчальних програм у контексті співвідношення фундаментальної і прикладної підготовки, форм і видів занять теоретичного і практичного навчання та ігнорування можливостей оптимізації змістовного складника на засадах уніфікації освітньо-професійного та сертифікаційного процесів.

Доведено необхідність організації та проведення навчання фахівців суб'єктів системи авіаційного пошуку і рятування (органів виконавчої влади, ДСНС, ЗС України, Національної гвардії, Національної поліції, Державної прикордонної служби), що залучаються до проведення операції з авіаційного пошуку і рятування на засадах інноваційних організаційно-педагогічних концептів (модульно-компетентнісного, суб'єктно-діяльнісного та метапредметного підходів) та вітчизняного і зарубіжного досвіду.

Ключові слова: органи виконавчої влади, авіаційна подія, інноваційна дидактика.

ПОВЫШЕНИЕ КВАЛИФИКАЦИИ РУКОВОДЯЩИХ КАДРОВ ГОСУДАРСТВЕННЫХ ОРГАНОВ ИСПОЛНИТЕЛЬНОЙ ВЛАСТИ, ПРИВЛЕКАЕМЫХ К ЛИКВИДАЦИИ ПОСЛЕДСТВИЙ ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЙ, СВЯЗАННЫХ С АВИАЦИОННЫМ ПРОИСШЕСТВИЕМ

Аннотация. Анализ комплекса мероприятий, направленных на выявление воздушных судов, подвергшихся или терпящих бедствие в авиационном районе поиска и спасения Украины и оказания своевременной помощи пострадавшим, показал, что персонал органов исполнительной власти, органов управления поисково-спасательными работами и поисково-спасательные службы не всегда своевременно и недостаточно уверенно принимают решение на месте проведения аварийно-спасательных работ, недостаточно профессионально проводят поисково-спасательные работы (ПСР), нечетко организуется взаимодействие привлекаемых сил авиационного поиска и спасения, а также подразделений, которые непосредственно проводят ПСР.

С целью конкретизации недостатков в подготовке персонала, входящих во все органы управления авиационного поиска и спасения, авторами статьи была создана информационная база компьютерно ориентированных ситуативных процедур по перечню функций, определенных в разделе 3 (п. 2) Правил авиационного поиска и спасения в Украине (Приказ МВД Украины от 16.03.2015 № 279) для всех участников операции по авиационному поиску и спасению. По содержанию указанных процедур экспериментально была поставлена их отработка на специально организованных штабных тренировках с персоналом ГАКЦПС и АДЦПС, органов управления на аэродромах, оперативно-координационных центров ГУ (У) ГСЧС в областях. Привлечь к отработке эксперимента персонал государственных органов исполнительной власти не удалось.

На основе полученных результатов эксперимента с использованием методики оценки уровня компетентности, дало возможность аналитически определить интегрированный показатель профессиональной компетентности по выполнению соответствующих должностных функций каждой категорией персонала, деятельность которого связана в той или иной степени с функционированием системы авиационного поиска и спасения и непосредственным проведением поисково-спасательных работ.

По объективным причинам результаты исследования нельзя считать достаточно корректными из-за малого количества респондентов, участвовавших в экспериментальных исследованиях. Полученные выводы существенно коррелируются с результатами текущей проверки, проведенной в 2019 году Управлением авиации и авиационного поиска и спасения ГСЧС по вопросам поисково-спасательных действий персонала АПС во время реагирования на чрезвычайные ситуации, связанные с авиационными происшествиями. Но примененный интеграционный подход по определению оценочных показателей позволил достаточно достоверно установить тенденции. Сущностью

этих тенденций является несбалансированность учебных программ в контексте соотношения фундаментальной и прикладной подготовки, форм и видов занятий теоретического и практического обучения и игнорирование возможностей оптимизации содержательного компонента на основе унификации образовательного и сертификационного процессов.

Авторы убедительно доказали необходимость организации и проведения обучения специалистов субъектов системы авиационного поиска и спасения (органов исполнительной власти, ГСЧС, ВС Украины, Национальной Гвардии, Национальной Полиции, Государственной пограничной службы), привлекаемых к проведению операции по авиационному поиску и спасанию на основе инновационных организационно-педагогических концептов (модульно-компетентностного, субъектно-деятельностного и метапредметного подходов) на основе отечественного и зарубежного опыта.

Ключевые слова: органы исполнительной власти, авиационное происшествие, инновационная дидактика.

Problem statement. The effective functioning of search and rescue support for flights is a prerequisite for Ukraine to fulfil its obligations to its own people as a user of air transport services and an associate member of the EU in the context of international agreements. Timeliness, reliability and efficiency of comprehensive provision are the main components of the technological process of aviation search and rescue.

Civil aviation aircraft are, for the most part, airplanes with a passenger capacity of 150 to 850 people. Aviation accidents that may occur with such aircraft, in case of their fall, are usually accompanied by an emergency. The elimination of the consequences of such an emergency is carried out by central executive bodies, rarely at the regional level.

The permanent governing bodies responsible for the effective conduct of aviation search and rescue in case of an aviation accident are the appropriate search and rescue coordination centres

(SRCC) – the basis of the functional component of the Unified System of Aviation Search and Rescue Operations (USASRO).

The structure of this functional component includes: the Main Aviation Search and Rescue Coordination Centre (MASRCC) with four Aviation Support Search and Rescue Centres (ASSRC); Search and Rescue Coordination Centre of the Armed Forces of Ukraine; Aviation Division of National Guard of Ukraine; the Main Management Centre of the State Border Guard Service of Ukraine; the Civil Aviation Search and Rescue Coordination Centre; regional and structural units of organization and maintenance of air traffic within UkSATSE.

The forces involved in the direct conduct of aviation search and rescue operations include the Special Aviation Squad of the Operational Rescue Service of the SES and the regular aircraft from the listed ministries and agencies under contracts with the SES of Ukraine. Regional authorities are

involved in the search and rescue operations of an aircraft that is (has been) in distress by the operational coordination centres of the departments of the SES of Ukraine, with the involvement of search and rescue forces and the means of the territorial subsystem of the unified state system of civil protection (USSCP).

It is obvious that in difficult circumstances of an aviation accident the success of rescue and survival of the victims depends on the professional training of the specialists of the above-mentioned bodies of management and coordination and specialists of different profiles of professional direction that directly organise and conduct search and rescue operations (SARO).

But the multi-departmental structure of this system and the multifaceted, in the context of professional training, specificity of aviation search and rescue operations, often show not a sufficiently high level of efficiency of its functioning according to a human factor.

The common regulatory documents on aviation search and rescue, which are used by all central and regional executive authorities, are: Decree of the Cabinet of Ministers of Ukraine dated November 14, 2012, № 1037 “On measures to improve the organization and conduct of aviation search and rescue operations” and the Order of the Ministry of Internal Affairs of Ukraine dated March 16, 2015, № 279 “On approval of the Rules of aviation search and rescue in Ukraine”, registered at the Ministry of Justice of Ukraine April 01, 2015, № 364/26809 [1, 2].

However, in the aforementioned entities of the aviation search and rescue

(ASR) system, they look differently at the organizational and meaningful components of professional development of specialists in this field: the Armed Forces – in the structure of command training, in the context of the Rules of Search and Rescue Support for State Aviation Flights, the State Emergency Service of Ukraine – involving the Institute of Public Administration in the Sphere of Civil Protection, guided by the Rules of aviation search and rescue, the National Guard, the National Police and the Border Guard Service of Ukraine – according to the plans of professional training, on the basis of departmental Regulations as derivatives of the two previous documents above. The staff of the central executive bodies for training and professional development, with a focus on aviation accidents (AA), are extremely limited in the framework of programmes on subjects in the field of civil protection.

Therefore, there is no unified and standardized approach to the formation of training programmes for the development of specialists in the context of aviation search and rescue in relation to a single object – a distressed aircraft, the implementation of which is advisable to conduct, as stipulated by law, in a single educational establishment of the SES.

Problem formulation. The analysis of a number of search and rescue operations carried out at the occurrence of AA showed that search and rescue services do not always timely find the place where an aviation accident occurred, the decision on the site of rescue operations is not always sufficiently confident, the search and rescue

(SAR) operations are not professional enough, there is no clearly organized interaction between the executive authorities and the governing bodies involved in aviation search and rescue, as well as the divisions conducting SAR.

In order to specify the shortcomings in the training of personnel included in all aviation search and rescue authorities, the authors of the article created an information base of computer-oriented situational procedures for the list of functions defined in Section 3 (p. 2) of the Aviation Search and Rescue Rules in Ukraine (Order of the Ministry of Internal Affairs of Ukraine dated 16.03.2015 № 279). According to the list of these procedures, they were experimentally assigned to working them out at specially organized staff trainings with staff of MASRCC and ASSRC, governing bodies at the airfields, operational coordination centres of the HD (U) SES in the regions.

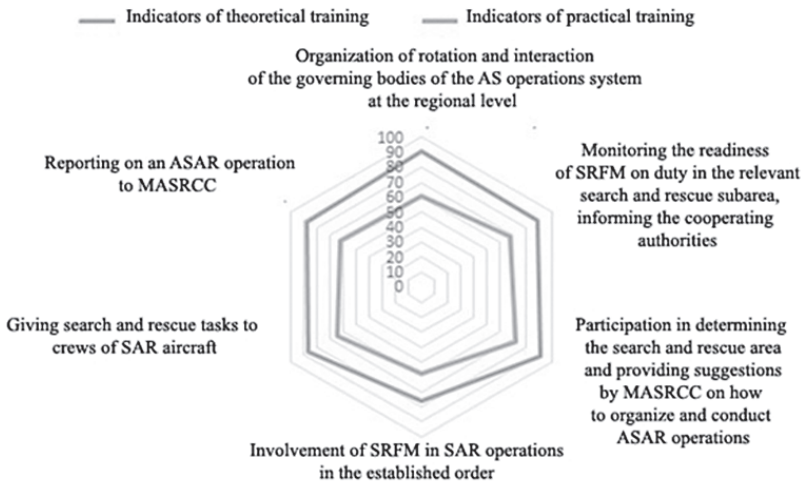
According to the results of the experiment, using the methodology of

assessing the level of competence, it became possible to analytically determine the integrated indicator of professional competence in the performance of the defined according to the post functions of each category of personnel, whose activity is related in one way or another, to the functioning of the aviation search and rescue system and direct search and rescue operations [3]. According to the obtained results, nomograms were constructed showing the level of functional competence of each category of respondents (Figure).

The assessment of professional competence was carried out by the following four criteria:

the first, the ability to plan, organise, and conduct ASAR operations within the competencies provided, using appropriate search and rescue technologies;

the second, the ability to create safe working conditions within the acceptable risk for the participants of SAR operations:



Indicators of the level of competence of personnel involved in conducting aviation search and rescue operations

the third, the ability to maintain continuous professional development, self-evaluation and reflection;

the fourth, the ability to model the behaviour of participants in the context of the SAR operations and to establish their partnership interaction.

Although the above nomograms cannot be considered sufficiently correct because of a small number of respondents who participated in the experimental studies, the reliability of the experimentally obtained conclusions is confirmed by the results of the ongoing review conducted in 2019 by the Aviation and Aviation Search and Rescue Department of the SES on the issues of search and rescue activities of ASAR personnel in response to aviation-related emergencies.

As a result of such an integrated approach to determining the metrics, the following trends have been established:

1. Specialists in the field of aviation search and rescue have a sufficiently high (satisfactory) level of theoretical training, which ranges from 75 to 85 points. At the same time, there is a statistically significant gap in the indicators of practical training of the personnel of the ASAR system in the context of transformation of theoretical knowledge within the practical working out of situational procedures related to an aviation accident and is in the range of 51–65 points.

2. While the object of aviation search and rescue for all participants of search and rescue operations is an aircraft in distress, the content of their training, retraining and professional development is determined by training programmes that differ significantly in their content, forms and types. That

is, approaches to the unification and standardization of the educational process are not being implemented.

The established imbalance of the curricula in the context of the ratio of fundamental and applied preparation, ignoring the possibilities of optimization of their content component on the basis of methods of unification, the imbalance of the forms and types of classes in theoretical and practical training make it possible to reasonably define the object and subject of the study and formulate its aim.

Object of study — aviation search and rescue of an aircraft and passengers who are in distress as a result of an aviation accident.

Subject of study — theoretical-methodological and organizational bases of training of the personnel of the SRS of the State Aviation of Ukraine on the principles of unification of educational and professional as well as certification processes.

The aim — to make certain of the necessity of the organization and training of specialists of the entities of state aviation of Ukraine (the SES, the Armed Forces of Ukraine, the National Guard, the National Police, the State Border Guard Service) involved in conducting aviation search and rescue operations on the basis of innovative organizational-pedagogical concepts, domestic and foreign experience as well as unification of educational and certification processes.

Analysis of recent research and publications. Problems of reliability of functioning of the system of aviation search and rescue are constantly in the centre of domestic and foreign scientific studies. The training of search and

rescue specialists, as one of the main components of the effectiveness of an operation, is thoroughly studied in the works of F. Nilsson, K. V. Surkov and H. S. Mandryk [4]. Professionally important qualities of rescuers are reflected in the works of V. Maryshchuk, O. Dyshkant, O. Timchenko, A. Shlenkov [5-7]. Psychological and psychophysiological aspects were developed in the works of S. Myronets, V. Medvedev, V. Maryshchuk [8, 9]. Organizational aspects of search and rescue support of flights in aviation are considered in the works O. Sobolev, V. Popov, A. Seleznev and others [10]. Medical and medical-psychological foundations in the field of search and rescue were analysed by P. Volianskyi, A. Makarenko, N. Drozdenko, S. Striuk, M. Dolhyi [11].

The United States of America and the United Kingdom are considered to be the leaders of the world education in the context of specialist training of the aviation industry. Studies on professional training of future specialists of different specialties in the USA, on the basis of comparative pedagogy, were conducted by domestic scientists Y. Belmaz, N. Beniuk, O. Dubovyk, O. Romanovska [12–15]. The generalized findings of the research results conducted by these scientists show that at the present stage of reforming the key areas of training should be modernization, integration, differentiation of the content of training, informatization, individualization and implementation of modern approaches and innovative methods.

The rethinking of the traditional training system updates the search for various factors to improve professional

education in the area of Civil Security, based on the above-mentioned issues of training, retraining and professional development of personnel of state aviation entities in the context of aviation search and rescue.

Presenting main material. The current state of search and rescue support for flights of the state aviation of Ukraine requires qualitatively new approaches to the professional training, retraining and professional development of specialists of coordination centres of aviation search and rescue, as well as specialists of emergency rescue works on elimination of consequences of an aviation accident.

In our opinion, it will not be superfluous to conduct a deeper study of the experience of the leading countries in the world, such as the USA and Europe, where there is a constant process of improving the professional training of aviation specialists.

The requirements for the training of aviation search and rescue professionals in the United States are implemented through the system of flight schools that are required to document the training course and conduct practical exercises after obtaining an appropriate licence from the Federal Aviation Administration. This approach makes it possible to certify each specialist involved in SAR operations and to issue them with qualification certificates of appropriate class qualifications for a specific group of aircraft that may be authorized by a specialist in aviation and rescue operations. Theoretical examination is an important aspect of professional training, which is conducted in special authorized test centres. Computer-based tests are

used to test theoretical knowledge. A streamlined computer technology system helps to increase the effectiveness of learning, enhances the ability to present a variety of dynamic training video, audio and animation information. The volume of test questions includes about 600 situational procedures that are close to real-life conditions.

Among European countries, the United Kingdom is actively pursuing measures to improve the quality of training of aviation search and rescue personnel. The practical implementation of personnel training tasks is the responsibility of specialized educational institutions. The peculiarity of the training is that only those with higher education are recruited for vocational training. Depending on a professional field, a specialist, after passing theoretical exams, receives a certificate or a national licence with the right to perform aviation rescue work. In general, the training of aviation specialists is carried out according to the latest achievements of science and technology. The focus is on aviation safety and following the appropriate instructions, with mandatory periodic certification [16].

In Germany, the professional activity of SAR specialists is impossible without a licence [17]. Theoretical preparation is usually 90 hours, after which an exam is taken. Practical training is based on the study of instructions before beginning practical classes, which are based on training exercises.

In order to study the Norwegian experience of preparation of future specialists of coordination centres, with the purpose of introducing it into the process of professional training of future specialists in higher educational

establishments of Ukraine, it made us turn to the methods of comparative pedagogy. In the Norwegian Specialist Training System, the attention is focused on improving the planning, organization, coordination and conduct of aviation search and rescue operations. Norway has harnessed the great potential of both human and logistical search and rescue resources, so it provides effective search and rescue not only in its area of responsibility for SAR operations, but also in other countries such as Denmark, Finland, Estonia, Sweden, Iceland, Greenland, the Faroe Islands. The Norwegian vocational training of search and rescue specialists is carried out in accordance with the requirements of international aviation organizations, and the best international experience in the field of education is constantly accumulated, adapting it to the needs of its society [4]. The concept of the Norwegian system of training of search and rescue professionals is focused on the implementation of such elements as the legal basis, organizational structure, staffing and effective financial support system. This conceptual basis for training is to standardize the relevant operational procedures within the partner countries of SAR operations. This guarantees the effective work of search and rescue personnel in the region in case of an AA or other emergency.

The analysis of the statistics on the number and effectiveness of conducted SAR operations, the equipment quality of the search and rescue forces and the level of their professional training are maintained at a high level through a systematic internship directly at the SRCC at Bodø Airport based at the

Emergency Response Crisis Centre provided by airline Wideroe. The processes of organization, planning, coordination, carrying out SAR operations were simulated in dynamics in this centre, questions about the conditions and tasks of professional activity were also clarified. The training is carried out under one-year programmes consisting of various modules, such as aviation search and rescue, marine search and rescue, coast guard radio activity, air navigation, and more. After completing the vocational training program, future professionals must take a theoretical and practical test. The results of these tests determine the suitability of applicants to effectively pursue a professional activity.

On the basis of the comparative analysis, conclusions were obtained regarding the leading factors that determine the effectiveness of the search and rescue system, as well as the systems of training of search and rescue specialists; problems in human resources, organizational and technical components of the training system were identified. It is established that not every element of the system performs regular assessment of the state of preparedness of personnel of the ASAR and establishment of needs for providing the educational process in the context of the requirements of international standards in search and rescue sphere. The Norwegian vocational training method provides creative use of professional knowledge, skills and abilities, formation of a complex of professionally important qualities in the conditions of real situations.

In the context of the European integration of Ukraine and the results of

the above-mentioned pedagogical comparison, new challenges to the national system of training, retraining and professional development of aviation search and rescue personnel are obviously emerging in terms of the need for its improvement and transformation on the basis of advanced educational technologies such as modular-competence, subject-activity approaches, combined with informative.

Modular-competence, meta-subject and subject-activity approaches are of great significance for upgrading vocational education in Ukraine, which is why highlighting their key points in the context of improving the training, retraining and professional development of aviation search and rescue professionals of all categories is an urgent need of time.

New emphases on the problem of the modular-competence approach in vocational education emerged in the mid-1990s in the situation of the urgent need for its standardization in the context of the introduction of common European basic models of vocational training for highly qualified specialists. The main characteristics of a modular competency learning model are not only the description of functions, but also the description of the profession, including interconnections and interdependencies in their process. Functional-process paradigm of modular-competence approach in professional training revealed its high adaptability, which is based on:

- structuring the content of vocational training;
- keeping a clear sequence of presentation of all didactic elements of the educational model (hierarchy of goals,

content, ways of managing cognitive activity) in the form of a programme algorithm;

- variability of structural personally oriented organizational-pedagogical and didactic-psychological units.

The modular-competence approach envisages the design of vocational training, based on educational and professional guidelines, goals and content of future activities. And after that, special attention is needed to the correction of the educational process and its diagnosis. The structural components of the modular-competence approach are the following: target setting; the content component; the organizational component; the result of the activity. The basis of the modular-competence approach is the modular educational and professional programme, which is based on professional competences.

In combination with a competency approach, meta-subject matter serves as a principle of integrating the content of vocational training and as a way of forming theoretical thinking and universal ways of professional activity. If a specialist whose activities in the future will be related to search and rescue operation in case of an aviation accident, independently finds ways of action when performing professional tasks on simulation models, this gained experience can be used in other extreme situations. The learner has the ability to identify the problem in a difficult situation and suggest ways to solve it. This characterizes the process of competency acquisition through the meta-subject organization of professional training of future aviation rescuers.

On the basis of the achievements of the world psychological and pedagogical

science, Ukrainian scientists of the late 20th and the early 21st centuries made a significant contribution to solving the theoretical and methodological problems of the subject-activity approach. The modelling of the cognitive process with the implementation of the subject-activity approach is based on the didactic-psychological construction of interactive interpersonal interaction of learners with those who teach, on the background of the functioning of the object of knowledge. At the same time, the organization of interpersonal interaction of the subjects of educational activity should be focused on theoretical and methodological aspects of modelling pedagogical situations, with substantiation of assessment criteria of the level of readiness of students to perceive and work with the proposed situations to be studied, and teachers – in the context of the ability to develop the educational content of such pedagogically subject-oriented activities.

From the foregoing, it is obvious that the application of these approaches to the actual practice of training, retraining and professional development with their traditional organization is related to significant difficulties, and with insufficient computerization (software and hardware component of this innovation process), is completely impossible. In addition, it should be emphasized that the declaration in the educational standards of the transition to modular-competence, meta-subject and subject-oriented activity approaches is insufficient and requires the development of science-based, close to real conditions techniques as for their implementation, with a focus

on the widespread use of process and functional capacities of information and communication technologies for modelling organizational-pedagogical and didactic-psychological processes for training specialists involved in SAR operations related to aviation accidents. A real mechanism for implementing these approaches can be a specially created professionally oriented information educational environment, built on powerful didactic capabilities of hardware and software in combination with information and communication technologies.

In Ukraine, training of personnel of the emergency rescue teams of state aviation and their management bodies is conducted in aviation divisions and subdivisions of the Armed Forces of Ukraine, the National Guard, the National Police and the State Border Guard Service of Ukraine. In aviation divisions (subdivisions) schedules of trainings are drawn up, plans of their carrying out are developed, necessary documentation is prepared, and the course of their implementation is organized and controlled. The preparation of thematic plans takes into account the technical equipment of the units of emergency and rescue teams, as well as the level of theoretical training of personnel. The evaluation of this training is carried out in accordance with the Standards of assessment of the quality of search and rescue forces preparation for the search and rescue operations.

Obviously, in this system the professional training of aviation search and rescue specialists is not capable of implementing the above described innovative pedagogical technologies and

cannot be oriented to the requirements of the relevant international standards.

Conclusions. Pursuant to the Aviation Search and Rescue Rules in Ukraine, the State Emergency Service of Ukraine is responsible for organizing and conducting the qualification development of personnel of aviation search and rescue management bodies, as well as civil defence officials involved in aviation search and rescue operations and aviation search and rescue activities according to the above-mentioned technologies [2, S. IV, p. 1, p. 8]. The preparation level of scientific and teaching staff, methodological and logistical support at the Institute of Public Administration in the Sphere of Civil Protection of the process of professional development of the listed categories of all subjects of state aviation meets all of the above approaches and requirements. Persons who have successfully passed the vocational training programmes are awarded a state standard education document that meets the requirements of international standards. But today, the implementation of this provision lies only in the plane of improving the regulatory framework.

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