ABSTRACT

UDC: 37.013:629.7

DOI: 10.26697/ijes.2020.4.5

Specifics of Professional Activity of Future Pilots of Civil Aviation

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Background:

The specificity of the professional activity of pilots is due to a significant increase in the intensity of flight traffic, which requires good health, both physical and psychological. According to the statistics of recent years, there is a natural tendency of a sharp decrease in the working capacity of pilots, deterioration of their health, and as a result, early professional unfitness. In this regard, the development of physical and psychological qualities of future pilots becomes especially important.

Results:

Specific features of flight activity are constant flight dynamics, high mental stress and high concentration, processing large amount of information and taking into account related factors, the need to make decisions in terms of time and time constraints, forced high pace. The professional activity of pilots is carried out in conditions under which the body is affected by noise, vibration, overload, significant changes in atmospheric pressure, temperature discomfort, elevated radiation background and electromagnetic fields, turbulence in the air, and other factors.

The analysis of research on various problems of flight activity allowed the scientist Onipchenko to single out the following main features of the pilot's work, with which we agree:

Multidisciplinary, diversity of nature and content of action performed;

- Skills of spatial orientation and change of psychophysiological characteristics of the pilot;
- Prolonged exposure to physical factors (overload, acceleration, noise, vibration, noise, changes in atmospheric pressure, fluctuations in temperature and lighting, etc.) that affect the physiological and mental functions of the body;
- Constant nervous and mental stress;
- Extremely intense pace of activity (pilot per flight performs, on average, 14 actions per minute in a normal situation and up to 21 actions in a non-normal one).

The professional activity of a pilot is a special type of work activity, which is determined by a set of professional tasks and responsibilities for the piloting of the aircraft. And an essential feature of the pilot's activity is that it is a constant interaction of man and machine. Accordingly, the process of training future pilots of civil aviation should include a wide range of training, both physical and personal skills.

Scientist Makarov to the special tasks of professional training includes the formation and improvement of: emotional stability, the ability to maintain the productivity of mental activity of mental activity and sensorimotor coordination under the influence of severe stress factors; the body's resistance to vestibular stimuli in different spatial planes and the ability to orientation in complex, unusual flight volume, stability, distribution and conditions; switching of attention; stability of working memory and thinking; ability to anticipate the development of situations; ability to work at a high forced pace in conditions of time limit and shortage; ability to make decisions in the conditions of influence of a complex of extreme factors and time intervals.

Plachynda argues that one of the professionally important qualities of aviation professionals is emotional resilience. The activity of pilots is accompanied by nervous and emotional stress due to the pilot load, waiting for the information signal, constant eye contact and observation of the cloudy sky, flying in difficult weather conditions. Accordingly, the activities of the pilot are rightly attributed to the highest neuropsychological category.

Mental states that occur with high mental stress are various manifestations of emotional stress. They can promote work activation and ensure the successful performance of professional duties under the influence of stressors. However, they can lead to disorientation, loss of control, difficulty distributing attention, perceptions, and inability to perform professional duties.

Conclusions:

The profession of a pilot is one of the key flight specialties, which expresses nervous and mental tension, information load, lack of time and the impact of physical environmental factors. In summary, we can say that the formation of the necessary professionally important qualities, in particular, the emotional stability of future pilots of civil aviation is one of the key and priority tasks of the flight institution of higher education. Therefore, the prospects for further research include an in-depth study of the problems of forming the emotional stability of future civilian pilots in the process of training.

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