

capable of automating most tedious and monotonous tasks. Because with the advent of modern technology, we don't need to memorize a lot of information.

5. Cyber attacks. Increasing use of AI in educational institutions may increase threats from cyberattacks and leaks of students' personal information. Protecting confidential data is becoming an important issue [1].

Artificial intelligence is an important part of our lives. It is used in science, education, medicine, remote control of robots, remote sensing of the Earth, and electronic commerce. However, AI was created by humans, and they must bear great responsibility for their work. These intelligent machines will perform “human actions” now and in the future.

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RELEVANCE OF UPGRADING THE TACTICAL AND TECHNICAL CHARACTERISTICS OF THE MEANS OF DEFEAT

The creation of modern and competitive means of defeat forces us to look for new approaches and develop new design solutions using modern special materials. These should include titanium, aluminum, aluminum and titanium alloys, special steels, as well as non-metals in the form of binding materials, reinforcing fillers, composite materials, rubber, rubber engineering products, thin-layer thermal insulation coatings, sealants, adhesives, ozone-safe degreasers, thin-layer thermal insulation coatings, etc. [1, p.3]. A special place in this list is occupied by rubber and products based on them – rubber engineering products.

In many cases, rubber engineering products became the forming source of the most modern objects of aviation, rocket and space technology and their constituent parts, new technologies and systems [2, p.1].

Means of defeat in their design, as a rule, contain rocket engines on a solid propellant as a propulsion system for delivering a warhead to a given point. In addition to high strength and high longitudinal stability under the influence of high temperature when burning solid mixed fuel with a temperature of up to 3500⁰C, the rocket engines on a solid propellant body must have an internal heat-resistant covering, since the strength characteristics of the body material are significantly reduced when exposed to high temperatures. And this limits the increase in the mass of the warhead and its delivery range.

It is obvious that the material for the internal heat-resistant covering must be a material with appropriate technical properties, in particular: low density and coefficient of thermal conductivity, satisfactory strength and technological properties, ability to connection without delamination with other structural materials in the multi-layer structure of the rocket engines on a solid propellant with the possibility of its production in Ukraine.

Such a structural material can be rubber of the appropriate composition, with a density of the order of 1.1-1.3 g/cm³, which is lighter than steel and aluminum by more than 6 and 2 times, respectively. It's worth noting, that rubber has satisfactory technological and other properties according to the appropriate technologies and is widely used for various rubber engineering products manufacturing, including reinforced and coatings of objects of rocket and space, aviation and other equipment. Thus, increasing the tactical and technical characteristics of means of defeat due to the usage of internal heat-resistant covering is possible by using materials, in particular rubber, along with traditional structural materials.

The implementation of this research direction can become a significant contribution to the further development of the Ukrainian economy, both during the legal regime of martial law and after its termination.

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