

Regulating soldiers body temperature, uniform technology summary



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Presentation Summary The presentation d as “ Regulating Soldier’s Body Temperature, Uniform Technology” was presented by Naser Alajmi and fellow team members. The presentation focused on how technology based uniforms can help manage the body temperature of on field soilders. This technology is necessary because due to changes in temperature soldiers have ended up experiencing severe injuries and some even experienced death. The presenters stated that a few soldiers ended up collapsing while they were training at the Welch Mountain during the period of 2013 and out of these six soldiers, two of them experienced death. A soldier may end up experiencing different health issues as a result of changes in climate in the areas they train and operate. These health issues can be divided into heat and cold based health issues. Heat related issues include heat cramps, syncope, fatigue and stroke and cold related health issues include hypothermia as well as frostbite.

There are various technologies that can help monitor and change the body temperature of the soldiers with the changes in the climate. These technologies including phase change, hybrid, and evaporative as well as circulatory cooling technologies. Phase change material is a technology that can help in managing soldier’s body temperature if this technology is used to design the uniforms of the soldiers. This technology has several benefits including reduction of sweat, feeling of cold and decrease body temperature if the soldier is experiencing excessive warmth. While managing the temperature of a soldier’s body, this technology even provides soldiers with comfort. The technology is useful for soldier’s clothing because it does not causes issues when it comes in contract with the gears used by the soldiers.

The technology lacks toxins; it is not flammable, is quite long lasting and can <https://assignbuster.com/regulating-soldiers-body-temperature-uniform-technology-summary/>

be reused.

In order to use this technology along with uniforms the technology needs wires to function. This can restrict the acceptability of this technology, but if soldier's uniforms have the ability to create electricity then this technology can easily be used. Another issue associated with this technology is fabric tearing but this problem may be experienced in the long run. Outlast is an existing clothing brand that has already developed uniforms for army professionals with the help of phase change material (PCM) (Armedforces-int. com 1). The company operates throughout the globe and is developing products that are made with PCM and these materials have been tested and approved by the American Society for Testing and Materials. These materials have been used to develop entire uniforms for military purposes along with helmets. The materials that have been created by Outlast comprise of Thermocules and these elements have the ability to store heat which is released when the temperature is excessively cold and the heat is stored when the temperature is excessively warm. This allows the temperature of a soldier's body to remain in the comfort zone that normal uniforms that do not comprise of PCM cannot attain. This even allows the soldiers to continue to train and fight in the war zone without feeling exhausted.

Works Cited

Armedforces-int. com,. Climate Control Clothing, Outlast Technology, Thermocules. N. p., 2014. Web. 23 Oct. 2014.