

Possibilities of Output Technology the Project ADAPTIV for Use in Infrared Camouflage

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Abstract : This article deals with the outputs of project acronym ADAPTIV of Czech Defence Research Project. This Project solved tends to adaptive camouflage. The camouflage is concealment by means of disguise. Perceptive interface between recipient and camouflaged object is visualized by means of textile modular screens. Screens special light semi-permeability enables front/ back projection with nearly identical light parameters. Information permeability, towards illusion creation, must be controlled by the camouflage provider by means sophisticated and mastered illusion with perfect scenarios. The project ADAPTIV was primarily funded with the maximum possible use of COTS (Commercial-Off-The-Shelf) principle asks special definition of feasibility conditions, especially recipient space position. This paper deals with uses the ADAPTIV output with name DATAsam with modification for infrared camouflage. It is focused on active camouflage in infrared spectrum of emissivity at $<8;14>$ μm for laboratory conditions. The main chapter provides basic experiments and testing physical properties needed for camouflage in infrared environment. The evaluation experiments revealed the possibility of use case in various types of camouflage.

Keywords : camouflage, ADAPTIV, infrared camouflage, computer-aided, COTS

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