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New Approaches to the Determination of the Time Costs of Movements

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Abstract : This article deals with geographical conditions in terrain and their effect on the movement of vehicles, their effect on speed and safety of movement of people and vehicles. Finding of the optimal routes outside the communication is studied in the army environment, but it occur in civilian as well, primarily in crisis situation, or by the provision of assistance when natural disasters such as floods, fires, storms, etc. have happened. These movements require the optimization of routes when effects of geographical factors should be included. The most important factor is surface of the terrain. It is based on several geographical factors as are slopes, soil conditions, micro-relief, a type of surface and meteorological conditions. Their mutual impact has been given by coefficient of deceleration. This coefficient can be used for commander´s decision. New approaches and methods of terrain testing, mathematical computing, mathematical statistics or cartometric investigation are necessary parts of this evaluation.

Keywords : surface of a terrain, movement of vehicles, geographical factor, optimization of routes
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