The Prototype of Mars Rover

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My work is dedicated to practical astronautics. On Mars, only two rovers are working now, but they conduct a general investigation of the planet and look for any trace of biological presence. My prototype has a different goal. It is designed to find a suitable location for a base where people can live. In addition, the rover has some structural differences from the existing ones. For example, instead of four leading motor-wheels, mine will have six. It will have a more powerful computer and new algorithms. In addition to the routine measurements of radiation background, atmospheric composition, temperature and soil analysis, the rover will attempt to grow herbs and potatoes in the Martian soil. For this task, there is a special module. So, the main goals are: 1. Design and develop a prototype rover capable of independent work on a designated program, or automatically. 2. Develop a system for automatic control of the rover. 3. Develop special studies modules (drilling, cultivation of vegetables). In conclusion, the proposed prototype rover presents a fundamentally new possibility for the exploration of Mars, and will be useful in future programs with manned Mars flights.

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