Hover Performance Experimental Setups for a Miniature Mars Rotorcraft Design and Preliminary Experiments

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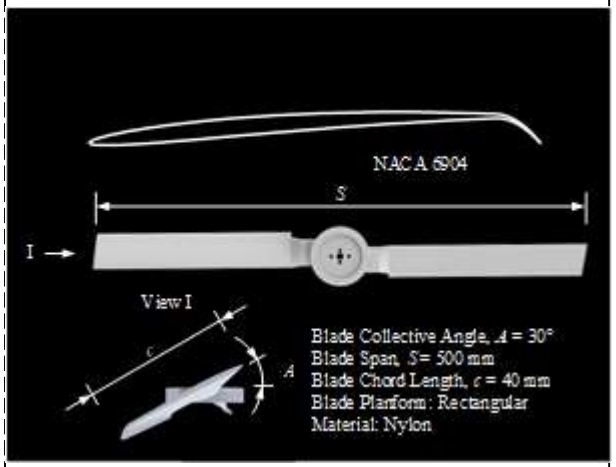
- Design of experimental setups for a miniature Mars rotorcraft.
- The measurement of lift by hover test stand is in an indirect way, by which the effect of rotor system's gravity is reduced.
- The results show that at the maximum speed of hover test stand, the lift generated by the rotor can achieve approximately **120 gf**, which means that it is possible for a coaxial rotorcraft with **200 g** mass to fly in Martian atmosphere.



Rotor model and parameters