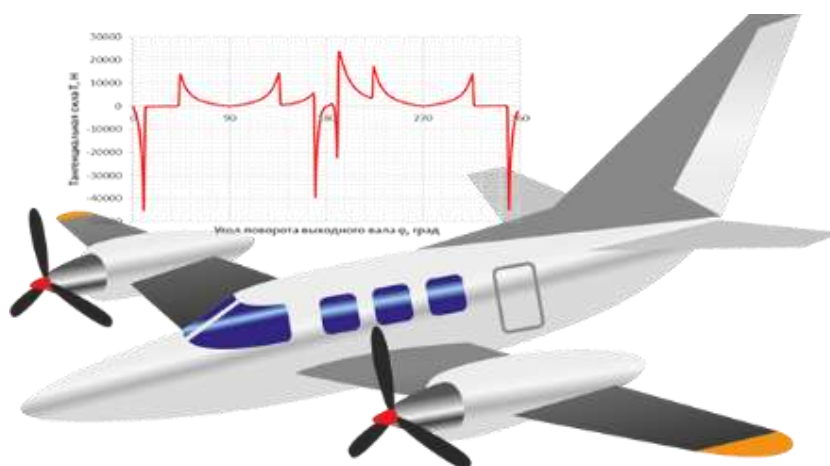


15.05.19

Preliminary kinematic, dynamic and load calculations performed by Inter Motor Group LLC, determined the main parameters of a promising new generation four-cylinder gasoline ICE for a 130-hp light-engine aircraft.



The calculation of the parameters of the ICE of the New Generation is associated with the assessment of the effectiveness of its use in conditions of limited parameters of the runway.

The purpose of the calculations is a preliminary assessment of the specific mass, overall, traction and fuel and economic indicators of the ICE of the New Generation installed on a light-engine aircraft.

The results of the calculations will make it possible to evaluate its advantages in terms of the duration and maximum flight altitude, taking into account the restrictions imposed by the requirements for mass-dimensional indicators.

ICE for a light-engine aircraft, unmanned aerial vehicle	ICE New Generation	ICE ROTAX 914
Engine displacement, l	0.95	1.2
Rated power, h.p.	130	100
at a frequency of rotation, rpm	2800	5500
Maksim. torque, N•m	497	128
at a frequency of rotation, rpm	2800	5500
Fuel consumption, l/100 km	23.8	27.2