



CONTROL SYSTEM FOR UAVS WILL BE COOLED WITH “SILICONE”

News / Manufacturer



United Instrument Manufacturing Corporation (part of Rostec State Corporation) developed a new control system for controlling a group of UAVs; the system was designated Vologda. It is fitted with a mobile supercomputer platform with a “silicon” cooling. According to designers, this is a special silicon-based non-conducting liquid. The platform’s performance is around 12 teraflops, N+1 reports.

Vologda’s computing system may be assembled on the basis of different types of processors, including Elbrus CPUs manufactured in Russia. Liquid cooling assures stable functioning of the system in a wide range of temperatures. According to United Instrument Manufacturing Corporation, the “silicone’s” freezing temperature is minus 80 degrees Celsius; boiling temperature – plus 200 degrees Celsius. In case of a leakage the equipment will not short-circuit.

Vologda system is able to work in a stand-alone mode for 7 days. It is fitted with five automated workstations. The control and communication systems of Vologda allow controlling up to 10 UAVs and ground-based robots; the data transfer is carried out via secured satellite, relay and wireless channels. UAVs may be controlled both on the ground and in the air.

Vologda may be used to control UAVs manufactured by various companies using different channels. Any other details related to the system were not unveiled. Standard military computing systems usually have air cooling.

16 OCTOBER 2015

SOURCE: RUSSIAN AVIATION

ARTICLE LINK:

<https://50skyshades.com/index.php/news/manufacturer/control-system-for-uavs-will-be-cooled-with-silicone>