



Russia Going “Green” for Kavkaz 2020

OE Watch Commentary: Kavkaz 2020 is a major annual regional strategic exercise, which rotates from Zapad [West] to Vostok [East] to Tsentr [Center] to Kavkaz [Caucasus]. As the *Izvestia* article points out, one of the side events will be public field trials of ecologically friendly field power sources. Armies have lots of field generators, which make noise and give off heat, making it difficult to hide the location of ground forces. These solar and wind-powered generators are still in the early stages, so wind-powered tanks are not on the near horizon. However, they may prove ideal for encampments and command posts. Of greater interest in the article are the foreign participants. Last year, China, India and Pakistan were among the players. This year India is not. Evidently the problem that China and India are having on their mountain borders have caused India to stay at home. India’s official position blames COVID-19. **End OE Watch Commentary (Grau)**

“Participants in the Kavkaz-2020 strategic exercise will be provided with ecologically clean energy... Wind turbine and solar generators ... will provide energy for command posts, weapons systems, military equipment, and tent camps.”

Source: “Маневры с энергией: на учениях «Кавказ-2020» испытают экогенераторы (Maneuvers with Energy: Kavkaz 2020 will use Ecogenerators”, *Izvestia*, 14 September 2020. <https://iz.ru/1060156/roman-kretcul-anton-lavrov-aleksei-ramm/manevry-s-energiei-na-ucheniakh-kavkaz-2020-ispytaiut-ekogeneratory>

Participants in the Kavkaz-2020 strategic exercise will be provided with ecologically clean energy... Wind turbine and solar generators ... will provide energy for command posts, weapons systems, military equipment, and tent camps. Unlike diesel generators, these new power supply systems do not disclose troop positions. In addition, they may save fuel.

During the exercises, the military will determine how effective wind and solar generators’ employment will be in the field, and what facilities they will be able to support in garrison... The 10 kW standalone power module... incorporates a photovoltaic and wind-energy capability and can supply power both in garrison and the field. There are also more powerful wind-powered systems with a capacity of up to 35 kW that operate at wind speeds from 2.5 to 25 m/s.

Today, power for tent camps and military equipment is provided by diesel generators. It is unlikely that the troops will stop using them anytime soon, but the new energy sources will significantly help to save fuel. According to Colonel Aleksandr Perendzhiyev, associate professor of the Russian University of Economics named after Plekhanov, stated that “during the exercises, it will be possible to determine how the solar and wind systems can meet the troops needs. It’s best to spend the diesel fuel saved by these power sources for refueling combat vehicles. In any event, based on the results of the maneuvers, orders and guidance documents will be issued on the employment of solar and wind stations.”

Military expert Viktor Murakhovskiy stated that “in addition to fuel savings, the new generators have another advantage. Diesel generators emit noise and heat, which assist enemy reconnaissance in detecting the positions of our troops. “Nowdays, the services are densely saturated with various electronics and electrical engineering systems.... Not only combat and support vehicles, but also a multitude of portable devices: field tablets, optronic reconnaissance devices, communications equipment, portable radio stations, and many others. The majority of these operate on batteries, which require charging. There are charging stations, but they are fitted on equipment which is not always available. Solar and wind generators are of immense importance in this situation. As for field kitchens and tents, it is unlikely that new devices will be able to fully meet their power demand. They need a reserve diesel generator.”

In recent years, the troops have received modern equipment for field support. Firewood-fed field kitchens are being replaced with crockpots and bakeries equipped with electric generators. Canvas tents with cast-iron stoves are giving way to modern shelters with climate control. They will provide comfortable rest for the servicemen even when the outside temperature reaches -50 degrees Celsius.... The Kavkaz-2020 strategic exercises will be held from 21 through 26 September at the Kapustin Yar and Ashuluk ranges, as well as in the waters of the Black and Caspian seas.... Deputy Defense Minister Aleksandr Fomin stated that ground forces, aviation and air defense groups, as well as the Black Sea Fleet and Caspian Sea Flotilla will be involved. Subunits from Armenia, Belarus, China, Myanmar, and Pakistan will participate in the ground force, while Azerbaijan and Iran have been invited to participate in the exercise rehearsal in the Caspian Sea waters.