

June 21, 1962 Dement'yev, 'About the Influence of Climate Conditions on Equipment and Weapons'

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Summary:

A report describing the influence that Cuba's tropical climate had on Soviet equipment and weapons. Corrosion, fuse failure, excessive oil consumption, and overheating are some of the effects mentioned.

Credits:

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Russian

Contents:

Translation - English

[handwriten: to Cde. Yeliseyev to Kuz'min (illegible signature and date)]

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ABOUT THE INFLUENCE OF CLIMATE CONDITIONS ON EQUIPMENT AND WEAPONS

- 1. A rapid failure of fuses is being observed in connection with the high air temperature due to an increase of the resistance of electric wires in the lighting circuits of tanks and SAU [self-propelled guns].
- 2. In the process of operating the ships a lowering of the resistance of the insulation in electrical wires is being noted, which is easily restored with the aid of drying.
- 3. A frequent corrosion of the plug stations of the radars is being observed in the P-8 and P-20 radars. The glass-lined resistors of the power supply fail when first turned on (after long storage). These incidents are prevented by heating the radar for 1-2 hours with just the heat turned on.
- 4. During a year of operation 50% of the APG-15's [a generator power supply] failed because the transmitting rubber couplings from the engine to the generator failed. On many parts of the electric wiring peeling of the paint and varnish coatings occurs and the wire from the magnet to the sparkplugs fails.
- 5. An overheating of the windings is observed in the power plant of the generator motor in the PUAZO [the antiaircraft director], which leads to a fire; contact with the solder is broken in places, probably due to the high humidity.

There are cases of short-circuiting of the microswitches of the antenna masts in the SON-9 [fire control radar] due to severe corrosion of the contacts.

6. Excessive overconsumption of oil is being observed in trucks and in vehicles which have been driven 8-10,000 kilometers.

In the opinion of our specialists the conclusion can be drawn that significant influences of the climate conditions on the equipment and weapons are not being observed, considering that the equipment is here for up to one year.

21 June DEMENT'YEV