DEVELOPMENT OF A STATIONARY PLASMA ENGINE AND ITS TESTING ABOARD THE 'METEOR' ARTIFICIAL EARTH SATELLITE

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Abstract: Information is presented on the development and flight testing aboard the "Meteor" artificial earth satellite of an experimental correcting engine complex with stationary plasma engines.

/Text/ The next "Meteor" meteorological earth satellite was launched in the Soviet Union on 29 December 1971. The satellite carried an experimental correcting engine complex (KDU -- korrektiruyushchaya dvigatel'naya ustanovka) with station-ary plasma engines (SPD -- statsionarnyy plazmennyy dvigatel')/1/.

For the first time space tests were carried out of stationary plasma engines of a fundamentally new design. The experiment demonstrated the workability of the KDU-SPD system under space conditions and the compatability of the functioning KDU with satellite systems, including the persistence of stable radio communication between the vehicle and the earth.

Telemetric information from the satellite made it possible to obtain a precise and full idea concerning operation of the KDU under space conditions. All characteristics of the KDU operating in space corresponded within the limits of measurement accuracy to the results obtained in ground tests.