Development of assembly technology for the radiating modules for the X-band active electronically scanned array in the current space radio systems

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The article presents the technology of manufacturing the radiating modules for the X-band active electronically scanned array (AESA) providing high reliability of information transmission, simultaneous operation at several frequencies and reduction of mass-size parameters. New materials are selected for sandwich panels of the receiving and transmitting radiating module, satisfying the requirements for the physical and mechanical characteristics and geometric parameters of the structure and providing the minimal effect on the electrical properties of the multilayer structure of the radio system as well. A prototype of the AESA radiating module was made.

Keywords: *active electronically scanned array, sandwich panel, radiating module*

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