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# Increasing the effectiveness of the non-destructive testing system for ground-based space infrastructure using ranked network models and destructive testing methods

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*The article discusses possible ways of improving the efficiency of non-destructive testing systems based on optimization of the structure of tested elements. The shortcomings of modern methods of collecting, storing, managing and analyzing information about the ground-based space infrastructure elements are analyzed. The possibilities of using network models ranked by criticality and the probability of failure for selecting optimal variants of repair strategies, applying electronic databases with scaling feature, and using destructive testing to obtain and accumulate information about the life dispersion and identification the reasons for the loss of working capacity by elements of space infrastructure are shown.*

**Keywords:** *ground-based space infrastructure, destructive and non-destructive control, network model.*

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