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# Selecting of a power scheme and calculation of the strength of the aircraft pylon beam

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*The article presents the results of design optimization of the pylon support beam for medium-haul aircraft aimed at reducing dead weight, as well as improve the efficiency of this beam. Designing of a new execution of support beam is based on the strength finite element analysis in MSC.Software PATRAN/NASTRAN. To assess the degree of compliance with the new design requirements set we carried out calculations of rigidity and the natural frequencies of the beam.*

**Keywords:** pylon support beam, finite element, strength, rigidity.

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