RESEARCH OF A SEAL WORK AS AN ELEMENT OF THE AIR ENGINE SUPPORT

© 2009. A. S. Vinogradov, A. P. Rempel

Samara State Aerospace University

The analysis of a seal work as an element of a engine support is executed. The features of heat exchange processes from the surrounding support housing air through walls to oil are considered for the various types of engines. For a concrete example the size of a thermal flow and temperature level for the walls washed by oil is valueted. The recommendations about the rational protection choice for the walls of an oil cavity are given.

Engine, face contact seal, support, heat exchange, thermal protection, thermal flow, oil system, oil cavity, buffer cavity, draining

Vinogradov Alexandr Sergeevich, candidate of technical science, docent of department «Construction and design of aircraft engines» of Samara State Aerospace University. Phone: (846) -267-46-75. E-mail: fdla@ssau.ru. Area of research: face seals, aircraft engine design, reliability of machines.

Rempel Alexandr Petrovich, postgraduate student of department «Construction and design of aircraft engines» of Samara State Aerospace University. Phone: (846) -267-46-75. E-mail: fdla@ssau.ru. Area of research: face seals, aircraft engine design and strength.

References

1. Tryanov, A.Ye. Drain system desing of oil cavities for aircraft engines: textbook // A.Ye. Tryanov, O.A. Grishanov, S.V. Butyl-

- kin. Samara: Samara State Aerospace University, 2006.- p. 83. (in Russian).
- 2. Hart K. Basic architecture and sizing of commercial aircraft gas turbine oil fleed systems// ASME-Pap-GT-2008-50450.