

## Summary

The problem to measure and control the process operated by a man has been and remains one of the major problems of modern production. Special attention is paid to non-destructive testing in any field of human activity. The object of study: ultrasound system of input control; the subject of study: the conditions of using non-destructive testing to control the parts of the aircraft body.

The proposed paper reveals the scientific and theoretical basis of non-destructive testing and implementation of ultrasound non-destructive testing to control the parts of the aircraft body through the introduction of innovative technologies.

As a result of paper execution in accordance with the general requirements the following was developed and designed:

- structural scheme;
- functional scheme;
- electrical schematic diagram;
- acoustic tract.

We have carried out the results of expert ranking, considered assessment of the quality level and calculated estimates for the research works. We have also analyzed the working conditions and energy efficiency