

- It's a good decision to inform the customer that team cannot complete the project on time. If so, the customer will probably try to help the developers by excluding some requirements or giving more time to complete the project.

That's why, the project manager, as an experienced team member, writes specification with the help of the other team members. There should be a standard set of requirements that must be considered. Specification itself should be accurate and unambiguous. However, there are few software development methodologies, which are based on an inaccurate specification. So it will be enough to write specification very briefly. This strategy helps to realize huge projects, when it's impossible to write everything in specification at once.

Anyway, writing specification is a continuous process of communication between a customer and a project manager. As a result the customer should sign the specification as an addition to the contract.

The project manager controls the development process. It's very important to draw a schedule and assign all the tasks to the appropriate team members. It's also important to assign tasks to employees correctly.

Every developer tells about completed tasks and shows the results to the project manager every day. If there are some problems, the project manager makes a decision on the ways of eliminating them.

Finally, I'd like to say that the customer and the developer should spend more time on analyzing the requirements because it will help to write specifications of the project more accurately.

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THE REPLACEMENT OF TRANSFORMER SENSOR ON POSITION PICK OFF UNIT (PPU)

The process of changing forces and moments acting on the aircraft due to the deviation in the flight controls, to form the desired trajectory, called control.

The devices through which the control plane, are called the control system.

The increased of take-off weight and flight speed of modern aircraft along with high security requirements lead to problems and complications increase the functions assigned to the control system of modern aircraft.

The feedback sensor "BR-48K" has several disadvantages:

- Small Resolutions;
- The wear as a result of friction and possible false signals of mechanization position;

Therefore appropriate to replace it with a non-contact transformer sensor PPU.

Potentiometric sensor replacement on transformer can increase the performance and life of the resource because the transformer sensor is not in contact and the related wear of moving parts sensor. This allows operation of the control system for the slats technical condition

For proper operation of the feedback sensor input shaft it should do 140 rpm during full output (input) slats, which lasts 7 seconds.

The output of the mechanism for moving slats №8 shaft makes 0.68 revolutions. It is necessary to design and calculate gear that is placed in front of the sensor to obtain the required parameters, namely gear ratio $U = 1 / 205.88$.

During the project the prototype aircraft was examined on the basis of medium-range passenger aircraft An-148 and its characteristics.

The analysis of the control system and directly examined its components. This allowed us to select an object of study – slats management system.

An analysis of the study shows that the system meets all requirements of the operation. Disadvantages include sensor feedback, who asked to be replaced.

As a result of the work was composed kinematic scheme of the new gear to accommodate the sensor PPU, and made his calculations. In particular were calculated to determine the gear ratio calculation spur transmission, calculation and design of the output shaft. Was conducted selection of rolling bearings and their calculation on durability. As a result of the calculations we made sure that the chosen gear scheme meets all the requirements, and the strength of individual parts is accomplished with considerable margin.

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THE PROBLEMS OF CYBER-SECURITY IN UKRAINE

Information Age creates a knowledge-based society surrounded by a high-tech global economy that brings significant benefits for individual, small and large social groups. Advantages of the new information society are obvious. A worldwide Internet network is a vivid example that demonstrates the impact of innovative processes changing relationship between people, expanding their contacts and opportunities and facilitating daily life. However, rapidly developing information technologies create serious threats to national and international security all over the world.