

end user of the product and requires only a few weeks of execution. Such features as robustness, security and reliability are traditionally examined during Beta testing. While concentrating on the product's quality, Beta testing also gathers users opinions on the product and confirms that it is ready for real time customers. Moreover, Beta testing decreases product failure risk due to user validation and enhances product quality via customer feedback.

Summarizing the report, it can be emphasized that both types of testing are vital in testing life cycle and provide manufacturing of high-profile, advanced and efficient products.

*Scientific supervisor: Hurska O.O.,  
Senior Lecturer*

UDC 656.714 (043.2)

**Urusov O.R.**

*National Aviation University, Kyiv*

## **AIRPORT SPECIAL PURPOSE VEHICLES**

For transportation of passengers between the terminal building and remote stands on the apron or between individual buildings at the airport it is possible to use regular buses or special buses. The special airport buses used for the operation on the apron usually have a bigger capacity than regular buses. Because they have not been designed for regular operation on public services, they can be wider and have lower clearance. This makes it easier for the passengers to get in and out. In spite of the fact that special buses have higher capacity, sometimes the capacity of one bus is not sufficient. Therefore the system of "bus train" is used, which consists of several units with a drive and semitrailers. Some airports use mobile lounges to transport passengers between aircraft or a remote terminal and the central-processing terminal. The advantage of the mobile lounge is simplification of the passengers' movements. The passengers do not have to change level as when using buses. If all the stands on the apron have been designed as remote and mobile lounges are used for transportation to them, there are advantages of a quieter and less polluted environment in the terminal building as aircraft are usually parked on remote stand positions. The vehicle can be used as a holding lounge while it is docked at the terminal frontage. For connecting a central terminal with a remote pier, which does not involve people movers or vehicles, is to bridge the taxiways.

The simplest and also the most widely used types of people movers within terminal building are escalators for overcoming changes in level and moving walkways for near-horizontal transport. Moving walkways are mostly used for distances up to 200 m. They usually do not significantly shorten the time taken to

reach the aircraft. The usable distance is limited by the walkway speed, which usually does not exceed 1.25 m.s. The length of walkway is also limited by the fact that it is only possible to get off of the walkway at its ends. Therefore several sections of walkways following each other have to be installed in the corridors to the gates. For transportation of passengers, flight crew, employees and visitors between individual buildings over longer distances at the airport: between terminal buildings, between a central terminal and satellites or between the terminal building and runway station or parking lots, the use of walkways is not appropriate, because of their slow speed. Shuttle buses are the most common solution but, as the demand becomes greater, it becomes appropriate to use an automated shuttle type of people mover either on one track or on parallel tracks. The first shuttle type of people mover in Europe was installed at Gatwick airport (Great Britain).

The reliability of people movers is usually higher than escalators or movable walkways, and are less vulnerable than buses to labour disputes. However, most failures bring the whole system to a halt, while a bus can easily be replaced. In the transportation peak the people mover operates at set intervals. Outside the peak it may be possible to call the vehicle by a pushbutton as with an elevator. There are many different types of constructions and drives. Some companies use fully automated carriages on tires with electrical drive, while the OTIS company uses its own technology, which is used for elevators, the carriages being driven by a steel rope.

*Scientific supervisor: Budko L.V.,  
Assistant Professor*

UDC 004.042 (043.2)

**Valchun I.O.**

*National Aviation University, Kyiv*

## **THE IMPORTANCE OF INFORMATION AND ITS FUTURE**

Though being widely used, Big data still have no exact definition. It is impossible to draw a definite line whether it is 10 TB or 10 MB. Yet, there exists a state opinion that big data are the combination of technologies which are to perform three main operations: to operate bigger than usual amounts of data, to process fast-coming data in large quantities, to operate both well-structured and badly-structured data. The typical example of big data is the information coming from various physical experimental constructions, for example from the Large Handroid Collider, which produces a great number of data and does it constantly while the scientists solve a lot of tasks with their help.

The appearance of big data in public is related to the fact that those data concern practically all people, not only the scientific community. Big data entered the public sphere of technologies when it concerned a quite exact number – the