

PROF. DR. HAB. ING. JÓZEF ŻUREK,
TITULAR PROFESSOR



Prof. dr hab. ing. Józef Żurek obtained a Master of Engineering degree at the Faculty of Mechanical Engineering of the Military University of Technology in Warsaw and in 1969 in the specialization of aircraft and aircraft engines' construction. In the years 1969–1973 he worked as a lecturer at the Central Training Center for Technical Specialists of the Air Force in Oleśnica. In 1973 he was transferred to the Air Force Institute of Technology (AFIT) in Warsaw as a senior laboratory engineer. In the years 1976–2012 he was promoted to the successive scientific positions: assistant, senior assistant, assistant

professor, docent, associate professor at AFIT, up to the title of full professor. Currently, he lectures at the Polish Air Force University on the following courses: Aircraft Operation Control, Aircraft Structure Research and Transport Systems Management.

Prof. dr hab. ing. Józef Żurek is a specialist in the field of reliability and safety of aviation systems. He was the initiator and co-creator of the first Polish support system controlling the military aircraft operation. This system, implemented in all types of Polish troops, is a natural laboratory for testing operational reliability and durability of aircraft, which has been in operation until now. He was also the initiator and co-creator of the TURAWA flight safety analysis and assessment system, which has been implemented and is currently used by the Polish Armed Forces. The TURAWA system enables the level of assessment of the safety in military aviation systems and the analysis of the causes of incidents and accidents, as well as the design of effective training and preventive ventures.



Scientific titles and degrees

- Professor title in *technical sciences*, 2012, from Warsaw University of Technology, Poland, nominated by the President of Poland.
- DSc (habilitation) in *transport studies* (specialty: *safety and reliability*), 1999, from Warsaw University of Technology, Faculty of Transport, Poland.
- PhD in *technical sciences*, 1981, from the Military University of Technology, Faculty of Armament and Aviation Technology in Warsaw, Poland.
- MSc in *aircraft and aircraft engines' construction*, 1971, from the Military University of Technology, Faculty of Mechanical Engineering in Warsaw, Poland.

Research and scientific activities

- Research project, GRANT No. 4 T12C 005 26
Preparedness, efficiency and safety of aviation-associated systems (in Polish).
- Research project, GRANT T00B 020 28
Training susceptibility study of the aircraft-pilot system on the example of MIG-29 aircraft (in Polish).
- Research project, GRANT No. O N504 0005 33
Forecasting the durability of selected aviation equipment devices in terms of aging processes (in Polish).
- Ordered project PBZ – MEiN No. 7/2/2006 (contract No.G008/ITWL/2007)
Integrated transport safety system (in Polish).
- Research project, GRANT No. 0085/R/T00/2009/09
IT support system for managing the continuing airworthiness of state aviation aircraft (in Polish).

He was awarded the Knight's Cross of the Order of Polonia Restituta by the President of the Republic of Poland for the modernization of the operation processes of military aircraft and the postponement of their decommissioning ordered by the manufacturer. For lifetime scientific achievements, he received the award of the Minister of National Defence and twice the award of the Chief of Aviation Technology for modernization of aviation technology operation processes.





A ceremonial meeting of the Scientific Council of Air Force Institute of Technology.

In 2005–2017, he chaired the Scientific Council of the Air Force Institute of Technology.

He was the supervisor of 10 doctoral dissertations. He conducted over a dozen habilitation colloquiums.

He made many reviews in doctoral and postdoctoral theses as well as procedures for the conferment of professorship.

He has published over 150 peer-reviewed articles and 90 conference papers.

He has developed and co-authored 13 books.

While performing the function of the Chairman of the Scientific Council of Air Force Institute of Technology, at the same time he was socially active as:

- Deputy Chairman of the Scientific Council at the Scientific and Research Centre for Fire Protection – 3 terms.
- Founder and member of the Polish Scientific and Technical Association of Operation.
- Vice-chairman of the Polish Safety and Reliability Association, currently a member of the Board.
- Member of the Academy of Engineering in Poland.
- Member of the Program Council of the “Winter School of Reliability”.
- Initiator and chairman of cyclical conferences on “Safety and Reliability” – KONBiN.

Main scientific publications and teaching manuals

- Borgoń J., Jaźwiński J., Klimaszewski S., Żmudziński Z. *Simulation methods of flight safety testing (in Polish)*. ASKON Scientific Publisher, Warsaw, 1997.
- Żurek J. *Symbolic modeling of security systems (in Polish)*. Warsaw University of Technology, Warsaw, 1999.
- Woropay M., Migawa K., Żurek J. *Evaluation and development model of operational availability for the subsystem in the maintenance transport system (in Polish)*. Institute of Sustainable Technologies, Radom, 2003.
- Woropay M., Żurek J. *A subsystem of rational machines operation (in Polish)*. Institute of Sustainable Technologies, Radom, 2003.
- Żurek J. (Ed.) *Service life of helicopters (in Polish)*. Institute of Sustainable Technologies, Radom, 2006.

- Jaźwiński J., Żurek J. (Eds.) *Selected problems of inventory control (in Polish)*. Institute of Sustainable Technologies, Radom, 2007.
- Tomaszek H., Żurek J., Jaształ M. *Forecasting damage threatening the safety of aircraft flights (in Polish)*. Institute of Sustainable Technologies, Radom, 2008.
- Co-author, *Integrated transport safety system. Volume I. Diagnosis of transport safety in Poland (in Polish)*. Transport and Communication Publishers. Warsaw, 2009.
- Co-author, *Integrated transport safety system. Volume II. Conditions for the development of transport safety systems integration (in Polish)*. Transport and Communication Publishers. Warsaw, 2009.
- Żurek J. *Reliability models of follow-up safety systems (in Polish)*. Institute of Sustainable Technologies, Radom, 2010
- Niziński S., Żurek J. *General Logistics (in Polish)*. Transport and Communication Publishers. Warsaw, 2011.
- Niziński S., Żurek J., Ligier K. *Logistics for engineers (in Polish)*. Transport and Communication Publishers. Warsaw, 2012.
- Gugąła T., Żurek J. *Unmanned aerial vehicle systems in controlled airspace (in Polish)*. Military University of Aviation, 2019.

