

EVALUATION REPORT

by Lieutenant Colonel Associate Professor Dr. Hristo Petrov Hristov

*regarding the competition for the academic position
“ASSOCIATE PROFESSOR”*

*scientific specialist “Design and construction of automatic and manned
aircraft”*

*in the professional field 5.5. “Transport, shipping and aviation”,
field of higher education 5. “Technical sciences”*

*with chief assistant doctor engineer Atanas Jordanov Ganchev,
chief assistant at the Institute of Defense “Prof. Tsvetan Lazarov”,*

I. GENERAL INFORMATION

By Order of the Director of the Defense Institute "Prof. Tsvetan Lazarov" No. 285/13.05.2025 and announcement in the State Gazette No. 29 of 04.04.2025, under the competition announced by the Defense Institute for the academic position of "Associate Professor" in the field of higher education 5. Technical Sciences, professional field (PN) 5.5. "Transport, Shipping and Aviation", I have been appointed as a member of the Scientific Jury.

The only candidate who submitted documents and was admitted to participate in the competition is Chief Assistant Professor Doctor of Engineering Atanas Jordanov Ganchev, Chief Assistant Professor at the Defense Institute. As a member of the Scientific Jury preparing an opinion, I have received all the necessary documents in electronic form. The submitted documents meet the basic requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the regulatory documents adopted at the Institute of Defense for occupying the academic position of "associate professor".

II. FULFILMENT OF THE REQUIREMENTS FOR OCCUPATION OF THE ACADEMIC POSITION “ASSOCIATE PROFESSOR”

The submitted certificate for fulfillment of the minimum national requirements

under Art. 2b, para. 2 and 3 of the ZRASRB for occupying the academic position “associate professor” in professional field 5.5. “Transport, shipping and aviation” certifies the coverage of the cumulative quantitative requirements, formed on the basis of the indicators according to the annex to Art. 1a, para. 1 of the Regulations for the implementation of the ZRASRB. The total number of papers with which the candidate participates in the competition is 15, he proposes 15 scientific papers for review, I accept 15 for reasoning. The required minimum number of points is 400, and the actually achieved result is 468 points, distributed as follows:

- Defended dissertation work for awarding the educational and scientific degree "doctor", diploma No. B-005 / 08.06.2018 (50 points).
- Habilitation work - monograph with the title "Some aspects of flight operations for optimizing ornithological safety" (100 points).
- Scientific articles and reports in non-refereed journals with scientific review or published in edited collective volumes, a total of 13 issues, of which in 12 issues. author; 1 issue. co-author, - (245 pts.).
- Citations in non-refereed publications with scientific review – 21 pcs. (63 points) – Total citations (63 points).
- Participation in other scientific research activities (1 National project; 4 Ministry of Defense projects; 1 Defense Institute project. (10 points).

The candidate, as a senior assistant at the Defense Institute, participates in scientific and research work related to his direct duties as an expert in aviation equipment and procedures. This activity requires in-depth training and knowledge in the field of aviation equipment, as well as for his scientific and professional growth as an expert and researcher. The development of technical specifications, programs and methodologies for testing aviation equipment requires in-depth research and a well-founded assessment of high-level risks. In this regard, he has submitted a statement of his expert activities, which are directly related to the current procedure for associate professor:

- Programs and methodologies for testing aviation equipment to assess the technical condition and determine the possibility of extending the total technical

and inter-repair resources by air service life, calendar service life, number of landings, number of launches and number of teams – a total of 30 pcs. after 2020

- Development of technical specifications for supplies, services and modernization of aviation equipment – over 35 pcs. after 2020.

The candidate has attached a declaration of originality and authenticity of the attached documents. I have established that there is no open and proven plagiarism in the works submitted for evaluation.

III. EVALUATION OF SCIENTIFIC AND SCIENTIFIC-APPLIED CONTRIBUTIONS

The submitted publications can identify scientific and scientific-applied results of a contributing nature. The subject matter of the scientific works shows a clear and in-depth orientation of the author to issues related to the subject matter of the competition.

In terms of its subject matter and focus, the scientific production is distinguished by contributions in the following areas and fields:

- Ornithological safety;
- Construction and strength of aircraft;
- Construction and strength of power plants of aviation equipment;
- Aircraft control systems;
- Means for combating birds in the area of airports, actions of the crew to prevent collisions of birds with aircraft;
- Optimization of the flight operation process of the "crew - aircraft" system to increase the level of flight safety;
- Unmanned aerial vehicles (UAV) – design, operational characteristics, combat capabilities, navigation, communication and logistical support;
- Materials science of the elements of the construction of aircraft;
- Functional and strength characteristics of machine elements of aircraft;
- Simulators and imitators of the dynamic interaction and modeling of the process of collision of birds with aircraft;
- Technical documentation.

Senior Assistant Dr. Atanas Ganchev fully meets the minimum national requirements for the indicators for occupying the academic position of "associate professor" in PN 5.5. "Transport, shipping and aviation", field of higher education 5. "Technical sciences". The qualitative and quantitative requirements for occupying the academic position of "associate professor" according to the regulations of the Institute of Defense for the implementation of the ZRASRB have also been met.

IV. CRITICAL NOTES AND RECOMMENDATIONS

I can express my utmost satisfaction with the precision with which the documents for participation in the competition were prepared, as well as with the significantly exceeded minimum required number of points. I recommend the candidate to continue and deepen his research in the field of design and construction of automated and manned aircraft.

V. CONCLUSION

Senior Asst. Dr. Atanas Ganchev participated in the announced competition for the academic position of "associate professor" with scientific production that fully meets the requirements of the Act on the Development of the Academic Staff, the Regulations for the Implementation of the Act on the Development of the Academic Staff, as well as the Regulations of the Institute of Defense. In view of the submitted documents and scientific achievements, I express a categorically positive assessment and propose to the Scientific Jury to vote on a proposal to the Scientific Council of the Institute of Defense to elect Senior Asst. Dr. Atanas Jordanov Ganchev for the academic position of "associate professor" in the professional field 5.5. "Transport, shipping and aviation", field of higher education 5. "Technical sciences".

4 June, 2025

Sofia

lt. col. Ass. Prof.

/s/

H. P. Hristov