20 Elul 5780

9 September 2020

Tender with the Air Force

Re: **Center for Air and Space Superiority**

Tel Aviv University is establishing an academic research center for the study of air and space superiority. The Center will be situated in the Faculty of Social Sciences, where the studies of strategic and security are concentrated at Tel Aviv University, but it will be an interdisciplinary research center, encouraging development for research and researchers from other fields and from all corners of the campus.

**The Aims and Vision of the Center:**

* The Center will provide an infrastructure for interdisciplinary research in fields related to air and space superiority.
* The Center will promote research in fields related to air and space superiority.
* The Center will implement projects for entities in industry and in the security sector, including issuing calls for proposals that will be publicized by these bodies.
* The Center will support development of academic programs pertaining to aeronautics and will provide academic sponsorship for students studying and publishing research on these topics.

**The Structure of the Center:**

**Developing and imparting academic knowledge on the subject of air and space superiority**

* To recruit the worlds of research and civilian knowledge and utilizing existing tools and knowledge for the purpose of their integration, with respect to their implications and implementation, for the advancement of theoretical and practical knowledge in diverse fields related to air and space superiority.

• To serve as a teaching and research hub where researchers and research students from various disciplines and faculties will conduct research of significance both to their primary fields and to the field of air and space superiority.

• To establish an academic research infrastructure in Israel for the systematic and sustainable academic engagement with the discipline of air and space superiority, in all its many facets.

• To develop, over time, a reserve of senior researchers and academics, whose research will cover various aspects of air and space superiority, in order to advance the formation of a body of knowledge relevant to the Air Force’s spheres of interest.

• To be an incubator and a guiding and facilitating entity for researchers on behalf of agents of research and industry, such as the aerospace industry and state and military bodies, such as the Air Force, which conduct academically-oriented aeronautic-military research for selected employees or industry and research bodies.

• To be an incubator and a guiding and facilitating entity for select officers of the Air Force who will engage in a period of research integrated with multidisciplinary academic training, with a central focus inclined towards military and security concerns.

**The Structure of the Center:**

Director of the Center: a professor from Tel Aviv University.

Role: Management, leadership and professional supervision of all research and study activities at the Center.

Appointment: The director of the Center will be appointed by the university rector, following consultation with the dean of the faculty. The appointment will be approved by the Center’s steering committee.

Researchers: Researchers will receive an academic appointment as researchers in accordance with the university’s regulations for researchers. Bodies of industry and research, and the Air Force will be entitled to send researchers on their behalf, who will hold the status of visiting researchers and will be situated at the Center and conduct research there.

**Steering Committee:**

Role: Definition and determination of the Center’s activities and approval of the annual plan for the Center’s activities and budget; oversight of the Center’s activities and budget, by means of a detailed annual report that will be submitted by the director of the Center. The Steering Committee is also responsible for the approval of the appointment of the head of the Center.

Members of the Steering Committee: The steering committee will consist of the rector / the vice rector; the dean of the faculty; two senior academics, to be appointed by the dean of the faculty, a representative of the Israel Ministry of Defense - Directorate of Defense Research & Development (IMOD DDR&D) and five experts in the fields of air superiority, to be appointed by the Air Force.

**Scientific Committee:**

Role: The Scientific Committee will constitute the Center’s highest-level scientific body and will accordingly review all the competitive proposals for research grants submitted to the faculty (academic research, the first component of the Center) and will recommend to the Air Force the priorities for receiving research grants, from an academic standpoint. The scientific committee will advise and review all applied research at the Center, and its recommendations will be the basis and guiding point for decisions on their implementation. All applied research at the Center, and its recommendations will be the basis and point of reference for decisions concerning their implementation.

Members of the Scientific Committee: The scientific committee will consist of three senior academic faculty members, to be appointed by the director of the Center following consultation with the dean of the faculty, the assistant director of the Center and a representative of IMOD DDR&D.

**Center bodies:**

The center will combine four components: (1) Academic research projects at the university to be conducted by faculty members, (2) Policy studies to be conducted by researchers specifically recruited for this purpose, by industry personnel and Air Force officers, as well as invitations from IMOD DDR&D on topics that will be determined by the Steering Committee following recommendations of the advisory Scientific Committee, (3) Dedicated trainings and seminars, (4) A Master’s degree in Security Studies at the university, with focus and emphasis on topics of aviation strategy. Students and foreign researchers who will be recommended by industry bodies and the national security forces will be able to participate in the activities of the Center in addition to their degree-studies in the Master’s program.

As follows:

The first and second components:

Academic research based on competitive research grants, to be conducted by school faculty members, alongside additional researchers from the university and their PhD and Masters students.

Examples of research in the field: concepts for achieving air superiority in the age of autonomous systems; ethics of the use of machine-learning algorithms in robotic aerial systems; potential directions for international expertise for future aerial platforms and their impact on the battlefield; air enforcement by swarms; air-to-ground platforms; integrating cyber warfare with aerial warfare.

Applied research to recommend directions for R&D and policies for building power; systemic approaches and strategies to be adopted, which will be carried out by tenured researchers who will be recruited specifically for this purpose, and by industry personnel and the security forces, and Air Force officers who come to the Center for a year of academic study.

Examples of applied Research in the area of policy: policies of power-building of autonomous machine-learning systems and their application in the aerial battlefield; the operational approach of a decentralized “air force”; the impact of civilian technology on threats in the battlefield of the future; allocation and wittholding between manned and unmanned platforms; the place of the pilot and of the planner in the world of robotic battles; Red teams– how will the Air Force be destroyed in a future war? Black swans for Air Force dominance; conducting an aerial campaign at a distance of thousands of kilometers—approaches to power building and the like.

The third and fourth components:

Professional training and seminars. At the core of the training is a Master’s degree in the university’s Security Studies program, which will be organized so as to be completed within one year, or a Master's degree in the new program (October 20) for Cyber Studies, Politics and Society—a new international degree, which will be taught entirely in English to Israeli and foreign students alike, beginning October 20.

Sincerely,



Prof. Eyal Zisser, Vice Rector

CC:

Office of the President of the University

Office of the Rector of the University

Office of the Director General of the University Dr. Mira Klish

• The Center will serve as an academic umbrella for research in the fields of air and space strength, will promote programs of study and will provide academic sponsorship for students studying and writing research on aeronautical-related topics.

• The Center will carry out projects for industry and for the security forces according to calls for proposals to be published by them.

• The Center will constitute an interdisciplinary research infrastructure for research in the fields of Air and Space superiority.

• The Center will encourage research in the areas of Air and Space superiority.