

ADVOCATING SPACE - THE FISHER INSTITUTE FOR AIR AND SPACE STRATEGIC STUDYS AS A MODEL FOR ACTIVE NGO ROLE IN THE NATIONAL SPACE ARENA

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Abstract

Founded 15 years ago, the institute was established by the Air Force Association and connects former Air Force personnel to facilitate public discussion in Israel about aviation and space issues. Its objectives are to Encourage and conduct research and development in the field of air and space, to initiate and disseminate strategic studies on air and space warfare, and related matters.

A member of the International Astronautical Federation since 2013, the Fisher Institute is a very active player in Israel's vibrant space arena. The "crown jowl" of the Fisher Institute's activities is the annual Ilan Ramon International space conference, the largest of its kind in Israel, held jointly with the Israeli Space Agency and the ministry of science, technology and space. Attracting many space leaders (including heads of space agencies such as NASA, ESA, CSA, ASI, CNES and many others), industries, international organizations (including the IAF, ISU and UNOOSA), the conference is a major instrument to actively influence the space agenda on all levels - the policy, industrial trends, education and more.

Structure of the Fisher Institute

The Fisher Institute for Air and Space Strategic Studies is an NGO (legally it is a company to the benefit of the public), founded in 1999 by former Israeli Air Force Commanders and high ranking veterans, to encourage the public discourse on aviation and space.

As of 2014, the institute includes these research centers:

- Aviation Safety and Security
- Air Power research center
- Space and UAV's research center
- Aerospace medicine research center
- Information center and library

Public discourse through conferences and seminars

One of the main instruments of the Fisher Institute to address the public and media is to conduct conferences. The conferences are open to the public, most of them are broadcast live on the internet, and all the materials from previous conferences are available on the Fisher Institute's website, YouTube channel and printed proceedings are distributed to relevant audience. At the moment, there are three major international conferences the Fisher Institute is organizing each year:

- The Ilan Ramon International Space Conference, organized by the Fisher Institutes with the Israel Space Agency and the Ministry for Science, Technology and Space
- The National Security Conference
- The Civil Aviation Conference, organized by the Fisher Institute with the Israeli Civil Aviation Authority and the Ministry of Transportation



Heads of space agencies panel at the 2014 Ilan Ramon International Space Conference

Political involvement

The Fisher Institute's officials are frequently invited to attend and speak before parliamentary committees such as the committee for science and technology, and the economics committee. Furthermore, the Knesset (Israeli parliament) research center is consulted with the Fisher Institute staff on various issues related to space policies and activities.

On the committee of economics, Fisher Institute's staff is participating in various parliamentary discussions on civil aviation, presenting a professional, non-biased view on the matters under discussion, such as evacuating existing airports from Tel Aviv and Herzliya.



Israel Air Force Center, home of the Fisher Institute

National space policy for Israel

On the series of annual Ilan Ramon international space conference, the future of Israel's space agency and industry was a common issue for several years. The consensus among the speakers was that there is an urgent need for a viable and lasting space policy for CIVILIAN applications – hence dramatically increase the level of budget allocated to the Israeli Space Agency (ISA). The Fisher Institute decided to conduct a thorough and unprecedented research on the needs of Israel space program. Published on 2008, it was followed by a panel on the Ilan Ramon International Space Conference, bringing together ALL the heads of Israeli space firms. The President of the state of Israel (at the time) Shimon Peres asked for a panel of experts to submit a report on the matter. After the report was submitted, it was adopted by the government and the outcome was a dramatic increase in the budget of ISA, for a period of five years – allocated for civilian applications of space.

Educational enterprises

The Fisher Institute is constantly involved in education activities, from local enterprises to nationwide and international programs. The institute serves as the hub for the activities of World Space Week – a UN declared and recognized global space related education enterprise – since 2003, as the head of the space & UAV research center is the national coordinator for WSW.

The Fisher institute has a long cooperation with the International Space University – regular slot for ISU speakers at the Ilan Ramon International Space Conference and a free space on the international space exhibition adjunct to the conference are just few examples for the cooperation.

The Institute's staff is involved in the creating of the new educational website of the Israeli Space Agency – and provide the experience of 25 years in development of space related curricula for grades K-12. On another project, the institute is responsible for the curricula for nationwide courses for science and technology teachers, organized by the ministry of education.

For several years, the Fisher Institute was the organizer in Israel of *FIRST* robotic competitions.

International cooperation and collaboration

The institute is a member of the International Astronautical Federation, and encourages the participation of Israeli firms and individuals in the activities of the federation. The institute's staff member is a member in several subcommittees of the federation and a frequent speaker at the IAC's.

At the 2014 IAC in Toronto, the Fisher Institute is represented for the first time at the exhibition, and promotes not only the Ilan Ramon International Space Conference, but represents 6 Israeli space companies and institutions.

Regular cooperation with NASA, ESA and other space agencies, helps bring the new discoveries from space to the Israeli audience, and to further foster the relationship between Israel and the international space community.

The World Space Week activities organized by the Institute are another example of the institute's activity and presence in the international space arena.

Media appearances

The Fisher Institute's staffs are very thought-after speakers for national and international media. Hundreds of inquiries to the institute each year covering every aspect of the institute's activities – from aviation to space – allow the views of the researchers to be heard globally. Because there is no "Institutional view", and the intellectual independent of each staff member, the views expressed on the media are professional, non-biased and accepted as such.

Public Outreach

One of the major goals of the Fisher Institute is to address the general public on the issues of aviation and space. The institute operates an active

website¹, Facebook page², and bi-weekly newsletter on aviation and space. We encourage the participation of high school students in the conferences organized by the institute, especially the Ilan Ramon International space conference.



IAI Booth at the exhibition at the Ilan Ramon International space conference

Future plans

There are new initiatives under consideration by the institute. One of them (planned for the year 2015) is to build and operate a specially designed ground station for tracking and control of educational satellite. This innovative ground station will enable students to get hands on experience in communication and operation of Nano satellites. The ground station will be open to students nationwide, and will be capable of remote operations via the internet, through a dedicated web site. In the future, e-learning will be conducted with a collaboration of students from Israel and abroad.

¹ www.fisherinstitute.prg.il

² Currently only in Hebrew. English version to be introduced soon

