Israel and Egypt: such different neighbors...

In the middle of April, two neighboring Middle Eastern states, Israel and Egypt, launched their latest spacecraft. On April 9th, Israel launched its latest spy satellite, the Ofek 10, from its Palmachim air force base south of Tel Aviv. A week later, Egypt launched the geophysical satellite, EgyptSat 2 from Baikonur.

Israel began its space more than a quarter century ago. On September 19, 1988, it launched the Ofek 1 from Palmachim using the Shavit rocket. Israel did not conceal the fact that the satellite was designed for reconnaissance. However, this was a test launch, as was the launch of Ofek 2. These small satellites had masses of little more than 150 kg and had no equipment. The Israelis tested their solar batteries and communications gear. The third and subsequent satellites were “operational”.

The Ofek program demonstrated Israel's advanced technological capabilities, and made it the eighth state to launch a satellite using its own rockets. But it also showed that the Israelis did not expect to achieve peace with their neighbors, but rather to frighten them with their military strength. The current satellite, the Ofek 10, is intended not to watch Arabs, but Iran, according the Israeli press. In Israel, Iran's nuclear program is considered to be the main threat to Israel's security. Iran's hostility towards Israel is well known, but it seems that no one in the Israeli leadership has thought that the reason for its hostility is not entirely the innate antisemitism of Persians, but the Israeli occupation of Palestinian lands that has continued for almost half a century, since June 1967, including East Jerusalem, which contains the third most important holy site in Islam, the Al-Aqsa Mosque.

Egypt also joined the “space club” in 1988, and became its 60th member. True, Egypt did not launch its own satellite then, and had not even developed it, but simply ordered the European Space Agency, which launched a satellite from the launch site in Nauru. NailSat 101 served Egypt faithfully for 20 years as a communications satellite. It was used for broadcasting television and radio. In 2000, at the order of the Egyptians, a second communications satellite was launched, the NailSat 102, and in 2010, the next generation NailSat 201 was launched. Egypt was working on creating its own satellite for domestic needs in parallel.

In 1998, the Council on Space Research was created in Egypt. It included 20 specialists in various areas. The Council was assigned the task: begin developing a geophysical satellite for studying the desert that makes up 96 percent of the country. Occasionally, with the help of US satellites, similar studies had been conducted prior to this satellite. They were overseen by the Egyptian professor Farouk al-Baz, Director of the Center for Remote Sensing in Boston. As a result, researchers managed to discover lands and subterranean lakes suitable for development in the area of East Uweinat in the south of the country, near the Sudanese border. The development of more than 100 thousand ha. of land was begun there. However, the Egyptian desert was not systematically studied from space, and the development of the desert is a strategic goal for Egyptians in the new century. The rapidly growing Egyptian population no longer fits in the valley and the delta of the Nile.

Geophysical studies from space were a new undertaking for Egyptians, and there has been a shortage of knowledge and specialists. Graduates of Soviet universities associated with the project have suggested relying on Russia’s experience. Thus EgyptSat 1 was born, launched in 2007. In 2011 it developed its own resource. The creation of a new satellite was begun. At the base of RSC Energia, the EgyptSat 2 was constructed for four years. Around 70
Egyptian specialists took part in the operation. The satellite, with a mass of 1050 kg, is designed for remote sensing of the earth. It is able to take pictures in the visible and infrared ranges with high resolution. Its service life is estimated at 11 years. The data obtained will be used in geological, agricultural, and environmental research.

Note that the work to create the satellite, despite experiencing a few delays, continued through the two revolutions that shook Egypt in recent years. And the Cosmonaut Training Center near Moscow trained a group of Egyptian pilots.

Such different neighbors, such different goals for exploring the cosmos...

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