Israel’s Quest for Satellite Intelligence

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In the spring of 1995, the successful orbiting of Ofeg-3 (the name is the Hebrew word for “horizon”) represented the initial satisfaction of a longstanding Israeli desire: an independent space reconnaissance capability. For more than 20 years before they began receiving imagery from the satellite, Israeli defense officials had recognized that spacecraft offered unique capabilities to intensify information gathering in adjacent countries while extending their intelligence reach to more distant lands. After the nation was almost overwhelmed in 1973, Israeli intelligence officers further focused their efforts on preventing future surprise attacks. Satellite photography was seen as a vital tool, able to provide unprecedented warning about the movement of enemy troops and equipment in preparation for war, as well as the movement of enemy forces once hostilities were underway.

The value of satellite imagery was not unknown to the Israelis before the Yom Kippur war.

United States had acquired “wonderful coverage, but...didn’t get the pictures until the war was over.” Even those photos showed the positions of invading forces only during the earliest part of the war. The findings of the House Select Committee on Intelligence (the “Pike Committee”) in its recommendations to the Final Report in 1976 also indicate that the United States was unable to obtain adequate imagery and other information about the conflict while it was underway. As part of its criticism of US intelligence activities, the committee concluded that the United States had gone “to the brink of war” with the Soviet Union during the 1973 war because it lacked timely intelligence.

Israelian Dissatisfaction

If the United States was unable to obtain the satellite photography necessary to satisfy its own intelli-

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ginnce needs during the conflict, then it logically follows that it was likewise unable to provide any information derived from satellite intelligence to Israel. Faced with the possibility of imminent military defeat at the hands of enemies whose avowed purpose in past conflicts had been the total annihilation of the so-called Zionist entity, however, the Israelis were distrustful of US statements that it was unable to respond with desperately needed intelligence assistance. As Gur noted in 1992, "How could I know if [the satellite] was really damaged? The bottom line was that we didn't get the information."5

The general had expressed himself far less ambiguously as Israeli technicians were completing the final preparations for the launch of Ofeg-1, an experimental satellite, in September 1988: "The United States did not give us enough information [during the October 1973 war].6 When I say not enough, I mean less than what we got before the war."7 Exactly how long "before the war" Gur meant is unclear, because he is also said to have asserted that the United States had actually withheld satellite data from Israel immediately before the war.8

Presumably, the information which Gur believed had been held back by the United States would have revealed the true scope of Egyptian and Syrian preparations for war, thus providing adequate warning for the Israelis to prepare properly for the Arab attack. Instead, the Israelis found themselves in such a desperate situation that they deployed long-range missiles capable of delivering nuclear warheads on Cairo and Damascus after then-Minister of Defense Moshe Dayan warned that the nation might be on the verge of destruction at the hands of the Egyptians and Syrians.9

In their examination in 1991 of US and Soviet high-altitude aerial and space reconnaissance during the October 1973 war, Michael Russell Rip and Joseph F. Fontanella dismissed Gur's statements as "specious" and "probably made to help justify the Israeli space venture."10 In fact, Gur's sentiments merit far more serious consideration. Just as the war itself marked a defining moment for Israelis, so too did Gur's experiences in trying to obtain satellite intelligence from the United States clearly leave a deep and lasting impression on him. From Gur's perspective, the United States had kept critical satellite warning data from the Israelis before the two-front attack. Shortly thereafter, when Israel was threatened with imminent annihilation by the invading Arab armies, the United States had demonstrated to the Israelis that it could not be relied on to provide information vital to Israel's survival. Given Gur's assignment at that time and his later positions of influence, there seems little question that he would have been able to share his views with other Israeli security officials and decisionmakers.

**Going It Alone**

For the Israelis, the lesson was immediate and unmistakable: they would have to acquire an independent space reconnaissance capability. Details about the earliest Israeli investigations into an indigenous satellite program are extremely limited, but the little information available unambiguously indicates that it was at this time that Israeli scientists and engineers first seriously explored the possibility of launching a satellite. In little-noticed remarks following the launch of Ofeg-1 in 1988, Israel Space Agency (ISA) chairman Yuval Ne'eman disclosed that Israel had been working on the satellite since the early 1970s.11 Even more tell-

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had during the conflict, although perhaps only marginally so in the Israeli view. As part of an ongoing intelligence exchange with Israel, the United States supplied Israel with intelligence information based on satellite collection following the war, and has continued to do so in one form or another ever since. 13

Israel began seeking greater access to US satellite intelligence to augment its early warning capabilities immediately after the 1973 war. Ne’eman, then Israel’s chief defense scientist, included a request for intelligence satellite “services” in Israeli demands to be presented to the United States following the negotiation of the interim agreement at the conclusion of the 1973 war. 14 According to late Prime Minister Yitzhak Rabin, then-Minister of Defense Shimon Peres formally presented the United States with the Israeli request for a $1 billion satellite system in December 1975. Some months later, while testifying before members of Congress who were concerned that such a measure would hurt prospects for peace in the Middle East, Rabin indicated that Israel really did not require the satellite, after all. 15

United States policy with regard to providing satellite intelligence to Israel was uneven throughout the remainder of the 1970s, and

seemed to the Israelis to vary with each Director of Central Intelligence (DCI). George Bush was said to have approved providing actual satellite photographs to Israel while he was the DCI in 1976 and 1977. 16 When Stansfield Turner replaced Bush in 1977, he allowed the Israelis to receive only information based on satellite imagery, but not the images themselves. 17 The Israelis would grow increasingly concerned over these and other inconsistencies in United States policy.

William Casey’s arrival as the DCI in 1981 proved a positive experience for the Israelis, at least initially. Casey permitted them to requisition actual satellite photography once again. The imagery to be provided, however, was to be limited to that depicting potential direct threats to Israel’s security. 18 Having regained entrée to the imagery, Israel then asked the United States in early April 1981 for direct access to a US reconnaissance satellite. Israeli officials justified the request as “compensation” for the planned sale by the United States of airborne warning and control system (AWACS) surveillance aircraft to Saudi Arabia. Israel also voiced its increased need for real-time intelligence data and improved surveillance and warning capabilities due to its scheduled withdrawal from the Sinai peninsula in April 1982. 19

17 Ibid., A13.

The Postwar Years

Israel efforts to gain access to United States satellite imagery after the October 1973 Yom Kippur War proved more successful than they
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threats to Israel. Inman quickly found that the Israeli and United States concepts of what constituted such threats differed substantially. During their nearly six months of renewed access to US satellite imagery, the Israelis had obtained “a lot” of information not only about Iraq, but also about Libya, Pakistan, and other countries lying at considerable distances from Israel. The DDCI immediately restricted future distribution of satellite photography. The Israelis were to be allowed to receive imagery only of areas within 250 miles of Israel’s borders. They could, however, make specific requests for any other coverage desired, to be approved or denied by the DCI on a case-by-case basis.

Israel’s then-Minister of Defense Ariel Sharon, according to Inman, was “furious,” and immediately protested the decision directly to Secretary of Defense Caspar Weinberger, who backed the DDCI. DCI Casey, who had been traveling abroad, disagreed with his deputy’s decision, but did not reverse it on his return. Instead, he effectively ignored it. Retired Israeli

Maj. Gen. Yehoshua Saguy, who served as the head of Israeli military intelligence from 1979 to 1983, confirmed that “Casey said] ‘yes’ all the time” to Israeli requests for satellite photography of areas lying farther than 250 miles from Israel’s borders. An unnamed Israeli official has been quoted as saying that the level of support in furnishing satellite intelligence provided by DCI Casey was considered extremely valuable by the Israelis, and that they referred to it among themselves as “Casey’s gift.”

The Israeli attack on the Iraqi nuclear facility became a significant factor in the continuing debate among United States officials over whether to grant Israel’s earlier request for a reconnaissance satellite. Advocates on both sides of the argument cited the raid to justify their positions. Proponents argued that satisfying the desire would reduce the likelihood of future preemptive strikes by helping to soothe Israel’s insecurities about its ability to detect Arab preparations for a surprise attack. Opponents noted that Israeli officials might use unhampered access to satellite intelligence to plan and execute even more attacks throughout the region. They also raised the matters of expense and the transfer of sensitive technologies. Finally, they pointed out that Arab concerns about the advantages that a satellite afforded Israel might prompt

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21 (No title), UPI, International Section, 26 November 1982 (LEXIS-NEXIS, n.d.).
the Soviet Union to provide similar capabilities for Syria, Libya, or other nations in the region.27

Israel and the United States were expected to discuss the Israeli request and other facets of satellite intelligence during talks in September 1981 aimed at strengthening strategic ties between the two countries. 28 The sessions reportedly included discussions about sharing intelligence as part of a broader joint effort to counter Soviet expansion and influence in the Middle East. 29 According to US defense officials, however, there was no specific mention of satellites during the conference. 30 As a result, the Israelis did not receive their own reconnaissance satellite system from the United States, nor were they given direct access to a US spacecraft already in orbit. In November, Weinberger and Sharon signed a memorandum of understanding for “strategic cooperation” between the two countries.

The agreement proved extremely short-lived. President Ronald Reagan ordered it suspended in December 1981 after the Israelis formally annexed the Golan Heights. Israel’s invasion of Lebanon in mid-1982 even further provoked the ire of US officials. It would be November 1983 before the United States, trying to make headway with its Middle East peace initiatives, offered to renew “strategic cooperation” with Israel.31

Continuing Complaints

Israeli officials grew increasingly impatient with the manner in which the United States responded to their needs for satellite intelligence. When the Israelis took actions that they considered to be in the best interests of maintaining their own security and protecting the Israeli people, the United States replied by further restricting access to the information or by abrogating existing agreements. The Israelis apparently perceived themselves as victims of the vagaries of United States policy. They could not depend on the United States to provide satellite intelligence. Indeed, some Israeli officials, most notably Sharon, concluded that the United States was not a reliable ally, period. 32

Even in the best of times, the Israelis had found fault with the arrangements for their access to US satellite intelligence. They complained that their requests for information based on satellite photography were often delayed or denied outright, or that the information that they did receive was frequently incomplete or dated.33

They objected that when actual satellite photos were provided to them, the image quality was intentionally degraded, sometimes rendering them useless for the purposes desired.34 Finally, they protested that US intelligence authorities frequently refused their requests for specific collection against targets of special interest to the Israelis.35

Immediately after the September 1988 launch of Ofeg-1, retired General Saguy, head of military intelligence from 1979 to 1983, compared Israel’s limited access to United States satellite information to the relationship between “a patron and his dependent.” 36 On the same occasion, another former head of military intelligence—who had also served as the head of Mosad, the Israeli secret service—described the situation in even less flattering terms: Meir Amit told Israeli radio that, “If you are fed from the crumbs of others according to their whim, this is very inconvenient and very difficult. If you have your own independent capability, you climb one level higher.”37

33 Gerald M. Steinberg, “Middle East Space Race Gathers Pace,” p. 20.
Clearly, Israeli authorities would have preferred to have bypassed these difficulties altogether with an independent space intelligence capability. Twice, in 1975 and again in 1981, they had tried to obtain from the United States either a complete photoreconnaissance satellite system of their own or unfettered access to an existing system. In both instances, their requests were refused.

An Independent Capability

Intelligence officials continued to press for an indigenous Israeli photoreconnaissance satellite. Then-Chief of the Israeli Military Intelligence Branch Shlomo Gazit in 1979 included a “spy satellite” on a list of military intelligence needs for the following decade. Gazit later noted that his request had been met by “a mixture of astonishment and scorn” by other Israeli officials. There could have been no other reaction. The Israelis had made little substantive progress toward developing a satellite, a launcher, or any of the infrastructure necessary to support a space program in the years following IAI’s 1973 study. Alon Ganei, a senior Israeli researcher in rocket propulsion, indicated in 1998 that even in the early 1980s there was still considerable debate over whether to enter the aerospace field at all.30

Those favoring an Israeli space capability finally triumphed in building, testing, and finally launching the satellites.44 It goes on to describe briefly the characteristics of each of the satellites successfully orbited so far, and accompanying materials provide an informative overview of the Israeli space program and the sophisticated products and technologies supporting it.

From a distance, Israel's expectations for United States satellite intelligence support may seem excessive, even preposterous.

November 1982, when Ne’eman, then Israeli Minister of Science and Technology, announced that Israel was establishing a space agency to build and launch satellites, including reconnaissance satellites.46 Later statements by ISA officials, including ISA Chairman Ne’eman, emphasized the commercial and scientific nature of the Israeli space program, denying outright that Israel intended to field a “spy” satellite.47 There was little question, however, that Israeli officials had reached their own conclusions about how best to satisfy Israel’s satellite intelligence needs.

A recent ISA description of the Ofeq satellite program indicates that the project began in 1982, with parallel efforts in research and development, construction of the necessary infrastructure, training of hundreds of engineers and technicians, and then designing,48

49 (No title), UPI, International Section, 26 November 1998.

The Israeli decision came nine years after Egyptian and Syrian forces attacked on separate fronts while Israeli citizens observed their most holy day. Not quite another six years later, Israel launched its first satellite. That the launch of Ofeq-1 occurred just two days before Yom Kippur was almost certainly no coincidence.